UNIVERSITY OF ALBERTA

RESOURCES, CONFLICT, AND CULTURE: THE SOUR GAS PLANT DISPUTE BETWEEN UNOCAL CANADA AND THE LUBICON CREE NATION

BY

VIRGINIA V. GIBSON

A THESIS SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS

DEPARTMENT OF ANTHROPOLOGY

EDMONTON, ALBERTA

FALL 1996

National Library
of Canada

Acquisitions and
Bibliographic Services Branch

395 Wellington Street
Ottawa, Ontario
K1A 0N4

Bibliothèque nationale
du Canada

Direction des acquisitions et
des services bibliographiques

395, rue Wellington
Ottawa (Ontario)
K1A 0N4

Your file Votre référence

Our file Notre référence

The author has granted an irrevocable non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of his/her thesis by any means and in any form or format, making this thesis available to interested persons.

L'auteur a accordé une licence irrévocable et non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de sa thèse de quelque manière et sous quelque forme que ce soit pour mettre des exemplaires de cette thèse à la disposition des personnes intéressées.

The author retains ownership of the copyright in his/her thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without his/her permission.

L'auteur conserve la propriété du droit d'auteur qui protège sa thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

ISBN 0-612-18156-1

Canada

University of Alberta

Library Release Form

Name of Author: Virginia V. Gibson

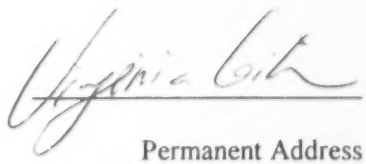
Title of Thesis: Resources, Conflict and Culture: The sour gas plant dispute between Unocal Canada and the Lubicon Cree Nation

Degree: Master of Arts

Year this Degree Granted: 1996

Permission is hereby granted to the University of Alberta Library to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly, or scientific research purposes only.

The author reserves all other publication and other rights in association with the copyright in the thesis, and except as hereinbefore provided, neither the thesis nor any substantial portion thereof may be printed or otherwise reproduced in any material form whatever without the author's prior written permission.



Permanent Address
52111 Range Road 210
Sherwood Park, Alberta
T8G 1A1

Date: 15 August 1996

University of Alberta

Faculty of Graduate Studies and Research

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitlted Conflict, Communication and Culture in Risk Management: A Case Study of Unocal and the Lubicon Cree in Northern Alberta in partial fulfillment of the requirements for the degree of Master of Arts.

Eric Higgs, Ph.D.

Steve E. Hrudey, Ph.D.

A. D. Fisher, Ph.D.

Ian Urquhart, Ph.D.

Raymond LeBlanc, Ph.D.

17 June 1996

ABSTRACT

A dispute between Unocal Canada, an oil and gas company, and the Lubicon Cree Nation, an aboriginal band, over a sour gas plant was adjudicated by the Energy Utilities Board (EUB) of the Province of Alberta in 1994. Qualitative social science methods are used in this study to explore the perspectives of all parties to this dispute. It is established that current risk communication and management strategies have not adequately identified or resolved the issues arising from the cross-cultural differences underlying the dispute.

A case study approach is used to explore themes such as: differences between Unocal, the Lubicon and the EUB that hinder effective cross-cultural communication, methods of designing cross-cultural communication to accommodate these differences, the performance of EUB dispute resolution processes in cross-cultural contexts, and the potential for other risk management and dispute resolution processes that accommodate cultural differences. A cross-cultural model of communication and conflict resolution is used to outline the differences between participants and the cultural contexts of the parties to the dispute. The results of this study show that successful cross-cultural communication and conflict resolution must address and accommodate cultural differences.

Key words: cross-cultural conflict and communication, energy resource management, Lubicon Cree Nation, Unocal Canada, dispute resolution, public hearings, Alberta Energy Utilities Board

To some I owe my inspiration
As from our many long orations
Derives this sour gas narration.

In truth, my research is:

A marriage between the two,
A dedication to,

My mother the anthropologist
My father the engineer.

Acknowledgments

I wish to give my thanks to the many people who provided time and energy towards this thesis. My warm regards go especially to Roger Creasey, Jim Spangelo, Frank Mink, Elaine Bishop, Fred Lennarson, Michael Asch, Nola Low, Darlene Bagstad and Chuck Lambert. I thank the members of my thesis committee, Dr. Ian Urquhart and Dr. Tony Fisher. Dr. Milton Freeman has also been a continual inspiration throughout my schooling. My fellow students in the *Eco Research Chair* in Environmental Risk Management have brought fresh perspectives to my work, in particular, Simon Thomas, Larry Reynolds and Wesley Dean.

I am especially grateful for the support of two individuals, Dr. Eric Higgs, my thesis supervisor, and Dr. Steve Hrudey, who provided the funding for my research through the *Eco Research Chair in Environmental Risk Management*. Dr. Higgs provided valuable guidance and insight as I sought to understand the interaction of technology and culture. Dr. Hrudey provided this arts student with the opportunity of working in a truly interdisciplinary environment. Without the benefit of their wisdom, support and experience, this research would not have been possible.

With the nitty gritty task of living, researching and writing, my thanks go to a key few. My confidante and colleague, Christina Lindsay, is a constant source of humour, lightness and brightness. Dreaming, playing, and fishing with Armand and Jody has kept me happy. My sisters, Diana and Carolyn, and my folks, Nancy and John, are all inspiration to me. They easily gave many hours of red penning, listening to my rambles, asking hard questions, and patiently attending as I had minor flip-outs at inanimate objects. Finally, I thank Simon, for his irreverence.

TABLE OF CONTENTS

CHAPTER I: INTRODUCTION ---- 1

BACKGROUND TO THE CASE ---- 2
Misrepresentations ---- *3*
The location of the sour gas plant ---- *4*
The hearings ---- *5*
RESEARCH QUESTIONS ---- 5
CHAPTER OUTLINES ---- 6
A NOTE ON REFERENCES ---- 7
DEFINITION OF TERMS ---- 7

CHAPTER II: PROFILE OF THE PARTIES IN THE DISPUTE ---- 10

INTRODUCTION ---- 10
THE ALBERTA ENERGY UTILITIES BOARD (THE BOARD) ---- 10
THE LUBICON CREE NATION ---- 13
UNOCAL CANADA ---- 17

CHAPTER III: LITERATURE REVIEW ---- 19

INTRODUCTION ---- 19
RISK MANAGEMENT ---- 20
Defining risk ---- *20*
Risk assessment ---- *21*
Challenges to risk management ---- *21*
Environmental equity ---- 22
Culturally based risk perceptions ---- 23
RISK COMMUNICATION ---- 24
Information transfer models ---- *25*
Consultation models of risk communication ---- *26*
Better risk messages do not guarantee conflict resolution ---- *28*
DISPUTE RESOLUTION ---- 28
Options available for dispute resolution ---- *29*
Focus on consensus approaches ---- *32*
CROSS-CULTURAL COMMUNICATION AND DISPUTE RESOLUTION ---- 34
Cross-cultural communication ---- *35*
Aboriginal response to contaminant information ---- 38
Fogo process ---- 40
Cross-cultural dispute resolution ---- *40*
Cross-cultural models: Issues of procedure and perception ---- 40
Cross-cultural models: Culture and power ---- 42
Including best available knowledge for risk management ---- *45*
What is traditional knowledge (TK)? ---- 46
Incorporating traditional knowledge: Current initiatives ---- 47
Establishing partnerships ---- 50
CONCLUSIONS ---- 51

CHAPTER IV: METHODS ---- **52**

BACKGROUND RESEARCH: LITERATURE REVIEW AND CONFERENCES ---- 53
DOCUMENT REVIEWS ---- 54
DATA COLLECTION TECHNIQUES ---- *54*
Focus Groups ---- *54*
The focus group ---- 56
Interviews ---- *57*
Interviews conducted ---- 58
Interview setting ---- 58
ETHICAL CONSIDERATIONS ---- 59
CODING AND ANALYSIS ---- 60

CHAPTER V: THE DATA ---- **62**

SECTION 1: OVERVIEW OF THE CASE ---- 62
Jurisdiction ---- *62*
The sour gas plant ---- *63*
Miscommunication ---- *64*
Relationship between Unocal and the Lubicon ---- *65*
Discussion of the hearings ---- *66*
Values ---- *68*
SECTION 2: RISK COMMUNICATION ---- 72
Technical comprehension of risks ---- *72*
Technical and community comprehension of risk ---- *74*
Recognizing cultural difference ---- *75*
Culture as behaviour ---- *75*
Worldviews ---- *76*
Traditional and scientific knowledge ---- *77*
Culture and the Board ---- *79*
Problems identified by the Board ---- 79
Improving cross-cultural communication ---- *81*
The technical understanding of risks ---- 81
Overcoming language differences and different comprehension of risks ---- 82
Recognizing and accommodating the cultural gap ---- 84
The Board's approach to cross-cultural communication: Past and future ---- 85
Industry and cross-cultural risk communication ---- 86
Cultural awareness training is only one step ---- 86
SECTION 3: THE EUB DISPUTE RESOLUTION PROCESS ---- 88
Three perspectives on the process ---- *88*
Industry ---- 89
The EUB ---- 89
Aboriginal and specialist perspectives ---- 91
Limitations of the quasi-judicial process in cross-cultural contexts ---- *93*
Mandate ---- 93
Costs ---- 94
Culturally inappropriate elements of quasi-judicial hearings ---- 95

Inclusion of the aboriginal perspective within the Board ---- 98
Inflated expectations of the process ---- 100
Familiarity with aboriginal culture ---- 101
SECTION 4: BUILDING RELATIONSHIPS ---- 103
Introduction ---- *103*
Why collaborate? ---- *103*
Realities of collaborative relationships ---- *105*
Advantages of collaborative strategies ---- 106
How are relationships established? ---- *106*
Inside the corporation ---- 107
Employment ---- 108
Industry / band relations ---- 108
Traditional knowledge ---- 110
Cultural shift on the part of industry ---- 112
Barriers to collaboration ---- 113
The future of cross-cultural disputes: Public or private? ---- *113*

CHAPTER VI: CROSS-CULTURAL COMMUNICATION AND DISPUTE RESOLUTION ---- 115

SECTION 1: DISCUSSION OF RISK COMMUNICATION ---- 117
Overview ---- *117*
Cross-cultural model ---- *117*
Factors affecting risk communication ---- *118*
Language ---- 118
Perceptions of the risk of the plant ---- 119
Communicative styles ---- 119
Cultural context and education ---- 120
Worldview ---- 120
Socio-economic status ---- 121
Power imbalances ---- 121
Cultural contexts of groups ---- *122*
Recommendations ---- *123*
SECTION 2: DISPUTE RESOLUTION ---- 128
Overview ---- *128*
Other forums for this dispute ---- *129*
Sources of conflict ---- *129*
Quasi-judicial reviews ---- *131*
Misrepresentations ---- 131
Jurisdiction over the land ---- 132
Cross-examination ---- 133
Representation ---- 134
Negotiating relationships ---- *135*
Directions for dispute resolution in Alberta ---- *136*

CHAPTER VII: CONCLUSIONS ---- 138

QUALIFICATIONS OF RESEARCH ---- 141

RECOMMENDATIONS---------- 142
DIRECTIONS FOR FUTURE RESEARCH ---------- 143
AFTERWORD: A MEETING WITH UNOCAL ---------- 144

REFERENCES---------- 145

APPENDIX 1: THOSE WHO APPEARED AT THE HEARING---------- 155
APPENDIX 2: HISTORICAL SUMMARY OF THE LUBICON CREE NATION---- 156
APPENDIX 3: SOURCES FOR THESIS, DATES OF INTERVIEWS----------158
APPENDIX 4: ETHICS APPROVAL, INFORMED CONSENT ----------160
APPENDIX 5: NOTICE OF PUBLIC HEARINGS----------162
APPENDIX 6: AMOCO CANADA LTD. ABORIGINAL POLICY----------163
APPENDIX 7: MAP OF PLANT AREA----------164
APPENDIX 8: TRADITIONAL LAND USE OF LUBICON CREE NATION---------165
APPENDIX 9: CURRICULUM VITAE OF AUTHOR----------168

CHAPTER I: INTRODUCTION

This thesis assesses one case of environmental dispute in a cross-cultural context, involving industry, aboriginal peoples, and a regulatory body. A case study approach and qualitative methods are employed to review current risk management, communication, and dispute resolution processes in the energy industry in Alberta. Public hearings late in 1994 formally resolved a dispute over energy resource use regarding the construction of a sour gas processing plant near unceded territory, but the conflict remains unresolved. In September of 1995, a boycott was declared on the company, Unocal Canada (in association with a boycott on Daishowa-Marubeni which operates a pulp mill in the same area), by the Friends of the Lubicon Cree Nation. From an analysis of this case of energy resource dispute in Alberta, emerge some lessons which can be transferred to other cross-cultural risk management contexts.

When the Lubicon Cree Nation did not receive the information they needed to make a decision about the sour gas plant, they turned to the regulatory agency to resolve the problem. The Lubicon claimed that Unocal deliberately misrepresented the plant. In their final decision, the Board wrote that they "believe cultural differences between the parties led to less than adequate communication of the project and its impact" (ERCB 1995a: 8). Research questions that assess this cultural difference relate to securing informed consent for industrial development, establishing dialogue between disparate groups, and coping with conflict.

This research involved members of the Energy Utilities Board[1], individuals from the Lubicon Cree Nation, supporters of the Lubicon, three corporations in Alberta, and specialists on legal issues, anthropology and risk management. The review of the case and the interviews conducted produce suggestions on how to recognize and manage cultural differences to achieve better risk communication and long-standing agreements.

---

[1] The ERCB is now called the Alberta Energy Utilities Board (EUB). In late February, 1995, the ERCB was merged with the Public Utilities Board, to form the EUB. In this thesis, it will be referred to as EUB or the Board.

This thesis does not, nor does it seek to prove one side or another right. Instead, the positions and interests of the various groups were sought with a view to combining them in order to identify opportunities to reduce misunderstanding and conflict. Given the intensity of some of the issues in this case (land claims, accusations of racism, power differences), there can be no quick and easy fix. This case is as yet unresolved, although the Board formally made a decision that the sour gas plant could operate. Although there were constant challenges to the Board's mandate and jurisdiction in the public hearings, this research operates with the understanding that the jurisdiction of an agency such as the EUB is insufficient to resolve many of the core causes of distrust and conflict. Given these constraints, this thesis identifies modest improvements that may result in incremental changes in both cross-cultural risk communication and dispute resolution.

Culture was invoked by the Board as an explanation for both misunderstanding and conflict. The study of culture, in its many guises, is the realm of the anthropologist. The intersection of a corporation, aboriginal group and regulatory board, each with a distinctive worldview, lends itself to anthropological investigation. Qualitative analysis is the approach used for this study; it is "the search for patterns in data and for ideas that may help explain the existence of those patterns" (Bernard 1988: 319). Qualitative methods provide a framework for discussion of an intense conflict, identifying patterns, overlaps, and differences among the groups involved.

BACKGROUND TO THE CASE

The responsibility of the energy resource regulatory Board in Alberta is "to ensure that when development occurs, it does so in a way that optimizes the benefits to the Alberta public. At the same time, development must minimize negative effects on the environment, social values and way of life of Alberta citizens" (ERCB 1993:7). In their decision on the Unocal case, the Board "recognized that there have been some social impacts brought about by industry (on the Lubicon), but it must also be cognizant of its responsibility to regulate the energy industry in the overall provincial public interest" (ERCB 1995b: 3).

The first Board review occurred in December 1993 when Unocal Canada Management Limited applied to the appropriate regulatory body, the Energy Resources Conservation Board (ERCB), to build a sour gas plant. A sweet oil battery was already on the site where the plant was to be built. With 9 to 13 gas wells sitting in suspended status, Unocal applied to build a gas plant near Little Buffalo, Alberta. Unocal published notices, contacted the Lubicon Cree Nation who were directly affected and established that there were no objections to the plant expansion. With these requirements fulfilled, the Board granted permission to Unocal in January 1994 to proceed.

The second review began when the Lubicon contacted the EUB indicating that they were not fully informed at the time of the original approval and had concerns with the safety, health, environmental, and social impact of the plant. In particular, the Lubicon stated that they were unaware that the gas plant was to be sour. In the ensuing time, letters were exchanged and meetings took place in attempts to resolve the conflict. However, Chief Ominayak indicated that the help they "need from Unocal is to get your plant out of our territory" (Lennarson 1995). Public hearings were convened to consider both Unocal's gas plant application and the application by Alberta Power for the proposed substation to service the gas plant.[2] The hearings were attended by members of the Lubicon Cree Nation, Unocal, and nineteen other groups supporting causes related to environmental, social, and political issues.[3]

Misrepresentations

The Lubicon believe that "Unocal officials misrepresented their plans to the Lubicons and deliberately created an ambiguous paper trail enabling them to tell the Lubicons that they were talking about expanding an existing oil battery station and to tell the EUB that the Lubicons had agreed not to oppose a sour gas processing plant" (Lennarson 1995: 6). Unocal, on the other hand, maintains that they were forthcoming

---

[2] The plant's processing capacity is 33 million cubic feet per day. Gas flowing to the plant has from 0-200 parts per million of hydrogen sulphide and is drawn from three different geological formations. The plant produces 0.64 tonnes per day of sulphur. In contrast with this, the Caroline gas plant, operated by Shell Canada, produces 9.00 tonnes of sulphur per day.

[3] Please see Appendix 1 for the full list of intervenors.

and clear throughout the entire procedure. Unocal states that the Lubicons were "misrepresenting the communication record of the team. (Unocal feels that) all elements associated with this project were explained in several direct meetings with the Lubicons. Unocal followed the normal notification procedure and then asked for and received approval" (Unocal 1994: 5).

In their final decision, the EUB decided that the Lubicon had indeed been unaware of the nature of the expansion of the plant. The EUB did not hold Unocal responsible for this, but instead attributed "the situation to inadequate recognition of cultural differences between the parties" (ERCB 1995: 18). I had no special powers of investigation or means to verify the truth of claims made to me on this issue by either side. Likewise, the EUB does not require its witnesses to take an oath and they cannot invoke sanctions concerning perjury. Hence they did not really have the tools to resolve this issue absolutely. It is not my intention to assess the veracity of either Unocal's or the Lubicon's position on the communication issue. Rather, *I have set out to examine the basis for this claim that cultural difference is at issue in this lack of communication. Furthermore, my goal was to look for solutions and a model which could overcome or avoid the problem; assigning blame was not necessary.*

The location of the sour gas plant

> The sour gas plant in question is located approximately 17 kilometres south of the community of Little Buffalo, and is approved to process 943 thousand cubic metres per day of raw sour gas containing not more than 0.635 tonnes per day of sulphur equivalent. The plant meets all regulatory requirements. [ERCB 1995b: 1]

Although this plant is seventeen kilometres from the current community of Little Buffalo, it might not be so far from the Lubicon community in the future. The Lubicon Cree Nation currently live in Little Buffalo, but intend to move the community once their outstanding land claims are settled with the federal and provincial governments. The gas plant is on an existing oil battery site, about four kilometres south of the approximately 250 square kilometres reserve area proposed by the provincial government for the Lubicon in 1988 following the negotiation of the Grimshaw Accord (ERCB 1995a: 2).

The hearings

The sour gas plant hearings occurred over ten hearing days in November and December of 1994. By the time of the hearings, all sides expressed frustration with the situation. Mr. O'Ferrall, the lawyer for Unocal, opened his introduction at the hearings by stating that:

> Unocal doesn't know what the issues are. We didn't know that colonialism was an issue. We didn't know that holistic and spiritual networks were an issue. We didn't know that suicide was an issue ... We didn't know that nonreporting of spills in California was an issue. We didn't know that some military government in Burma was an issue. We didn't know that deception was an issue. I guess the bottom line is that we would like to ... hear and be educated as to what the issues are in this hearing. [ERCB 1994a: 69]

On the other side, Lennarson, advisor to the Lubicon, wrote:

> Tension was high and sparks flew from the first day of the hearing when Unocal unsuccessfully tried to disqualify all intervenors but the Lubicons to the last day of the hearing when the Unocal lawyer -- who is coincidentally a law partner of ex-Alberta Provincial Premier Peter Lougheed -- threatened that an adverse ERCB decision would 'negatively affect' the way Unocal views Alberta as a place to invest. [Lennarson 1995: 3]

The hearings were adversarial, and although they resulted in a decision by the EUB to allow the sour gas plant to proceed, the tension between Unocal and the Lubicon Cree is still apparent.

RESEARCH QUESTIONS

After witnessing the public hearings, I was convinced that there were significant differences between the groups present at the hearings. Research questions aim to identify and accommodate these differences. They are:

- What are the differences among Unocal, the Lubicon and the EUB that hinder effective cross-cultural communication?
- How can cross-cultural communication be designed to acknowledge and accommodate these differences?
- How does the EUB dispute resolution process fare in cross-cultural contexts?
- Are there other risk management and dispute resolution processes that accommodate cultural differences?

Aside from the questions of misrepresentations, the relationship and differences between Unocal and the Lubicon were not effectively recognized and accommodated in this case. A cross-cultural model of both communication and dispute resolution is used in this thesis to outline the differences, such as differences in worldviews, and the cultural contexts of the parties. I will argue that an effective process for communicating and managing risks must include these factors.

CHAPTER OUTLINES

The history and backgrounds of the proponent, the regulatory board, and the Lubicon Cree Nation provide the setting for this work; these are reviewed in Chapter II. Chapter III includes a review of the pertinent literature. Risk management, risk communication, dispute resolution and integration of traditional knowledge are the areas that provide a theoretical and practical framework for this thesis. Chapter IV reviews the methods employed in this study. These include: document and transcript reviews, focus groups, and interviews.

In Chapter V, the data are presented in four sections. Chapter V is organized around the major themes of risk communication and dispute resolution. Section I reviews the case, the legacy of miscommunication, the relationship between Unocal and the Lubicon and provides an overview of the hearings. Section II concentrates specifically on risk communication. The reasons for miscommunication both before and during the hearings are reviewed. While there are many recommendations made for cross-cultural risk communication, this section concludes that accounting for cultural difference does not guarantee harmony. Section III focuses on various views of the public hearings process, changes, and the limits to these changes. Many of the participants in this study feel that there are limitations in the current public hearings process when it is applied to cross-cultural conflict. Some of these problems relate to cross-examination and representation of the aboriginal perspective in the quasi-judicial forum. Section IV identifies a trend in Alberta towards more informal and collaborative processes. Industry and aboriginal groups are currently meeting outside of the quasi-judicial process to negotiate

relationships concerning employment, co-management and land use. These initiatives are reviewed as they can provide greater outcomes and benefits to both industry and aboriginal groups.

Chapter VI critically analyzes the data and contrasts it with the literature review. In Section I the differences amongst groups are outlined. These relate to: socio-economic status, worldview differences, power differentials, communicative styles, educational background, contexts, perceptions of risk and language differences. If these factors are unrecognized or ignored, cross-cultural communication will be hindered. This section also outlines the cultural contexts of the decision-making body, the Lubicon and the Unocal. Acknowledgement of these contexts (decision-making power, structure) are key to successful communication. Section II concentrates on the forum of public hearings and the current initiatives in Alberta towards collaborative partnerships. Aspects of the quasi-judicial system that are culturally inappropriate and barriers to integration and understanding the aboriginal perspective are reviewed.

Chapter VII reviews the major conclusions from this thesis. Recommendations for more effective risk communication and dispute resolution derived from the interviews and the literature review are described.

A NOTE ON REFERENCES

Most references are referred to directly and can be found in the reference list. However, in the data sections each source is referred to by a number. The individual's group and corresponding number can be found in Appendix 2. In cases where the individual indicated that they wished their identity to be known, their real name is used.

DEFINITION OF TERMS

ADR Dispute resolution, or alternative dispute resolution (ADR), is a field embodying principles of interest-based negotiation in generating consensus. Several options are included under the ADR umbrella, including mediation, negotiation, conciliation and arbitration. [LeBaron 1992]

Culture

First, culture has been used to refer to the "pattern of life within a community - the regularly occurring activities and material and social arrangements" characteristic of a particular human group (Goodenough 1961: 521). In this sense, culture has referred to the realm of observable phenomena, of things and events "out there" in the world. Second, culture has been used to refer to the organized system of knowledge and belief whereby a people structure their experience and perceptions, formulate acts and choose between alternatives. This sense of culture refers to the realm of ideas. [Goodenough, Ward as quoted in Keesing 1981: 68]

Cross-cultural conflict

Cross-cultural conflict is a dispute or series of disputes relating to an issue between at least two parties where both belong to different cultural groups with differing values, perceptions and goals. I use the term to refer to communication between groups, such as between Unocal and the Lubicon, or between experts and the public.[4]

Ethnocentrism

Ethnocentrism is "the belief that one's own patterns of behaviour are always natural, good, beautiful or important and that strangers, to the extent that they live differently, live by savage, inhuman, disgusting or irrational standards. [Harris 1988: 125]

ERCB Energy Resource Conservation Board (now known as EUB)

EUB Alberta Energy Utilities Board (formally known as Energy Resource Conservation Board: ERCB)

Risk Assessment

should represent a rigorous, adaptive and interactive process of evaluating the nature and, if possible, the quantitative character (probability distribution) of risks for any particular activity or circumstance. [Hrudey 1994: 4]

Risk Communication

is an essential element of risk management which should represent a two way educational process between those who have assessed the dimensions of a risk and the potentially affected parties. If successful, risk communication should allow the knowledge gained from risk assessment to be translated into effective risk management. [Hrudey 1994: 4]

---

[4] Social scientists have used the term cross-cultural for comparative studies. Intercultural and intracultural are also used; the meanings vary and are not used with great consistency. For the purposes of this paper, cross-cultural will be used.

Risk Management

should represent an interactive design, planning, negotiation and/or regulation process aimed at reducing identified risks to levels which can be tolerated by potentially affected parties or by society overall. [Hrudey 1994: 4]

Sweet and sour gas

Natural gas is a light hydrocarbon mixture composed primarily of methane, ethane, propane and butane which is produced from porous geological formations. Its composition varies from site to site. It is classified as sour gas if it contains more than .5% (5000 parts per million) of hydrogen sulphide (H_2S). Otherwise it is considered sweet gas. Sour gas must be processed to remove the H_2S before it is introduced into the main distribution system. Sulphur is a commercial by-product of this process. Hydrogen sulphide is a respiratory poison with a toxicity comparable to hydrogen cyanide. It is lethal in atmospheric concentrations between 500 to 1000 parts per million (0.05 to 0.1% by volume of air).

The Alberta gas industry provides 90% of Canada's sour gas and in 1992 generated more than $5.5 billion worth of natural gas, gas liquids and sulphur. Because sour gas can contain up to 40% H_2S, there is a continuous risk of an uncontrolled release of gas into the atmosphere (a 'blowout'). The degree of danger posed by a sour gas release is a function of the proportion of H_2S in the gas, the total quantity of gas released, the physical conditions of the release and the prevailing weather conditions. Blowouts are expensive and dangerous to bring under control. Although there are no documented cases of serious, irreversible injury or death in the general public that have been attributed to Alberta's sour gas industry, there have been thirty occupational fatalities arising from hydrogen sulphide exposure in Alberta in the past fifteen years. Furthermore, an annual average of twenty accidental releases of hydrogen sulphide from pipelines and four from wells in Alberta are reported. Two public evacuations under emergency response plans have been initiated in the past five years (ERCB 1994).

CHAPTER II: PROFILE OF THE PARTIES IN THE DISPUTE

INTRODUCTION

Exploring the current means to resolve energy resource disputes in Alberta, and some of the opportunities and obstacles inherent in this initiative, can best be approached by examining established procedures for dispute resolution. These illustrate how public decisions have been conceptualised and handled in the past and provide a baseline for the development of new procedures. These procedures and the individuals and groups involved in the Unocal sour gas plant case will be introduced in this chapter. The descriptions provided on the intentions, roles and actions of each player that have been reviewed here derive from literature on these groups.

THE ALBERTA ENERGY UTILITIES BOARD (THE BOARD)

The Alberta Energy Utilities Board is a provincial agency designed to regulate energy resources. Decisions made by this body are binding; in the case of public hearings, they serve as a third party which makes the final decision on energy resource use. Before any case proceeds to public hearings, the Energy Utilities Board encourages industry and potentially affected individuals to meet and discuss their respective concerns. The cost of EUB operations is jointly shared between the government and the petroleum industry.

Ernest Manning, Premier of Alberta from 1943 to 1968, was involved in setting up the original body, the Energy Resources Conservation Board. He summed up the purpose of the Board:

> Our idea in setting up the Board was to have a regulatory body of competent people to deal with this difficult question of conservation and, so far as possible, to have them divorced from political influences. To our minds, conservation and development decisions had to be made on engineering factors only, not on political factors. The ground rules the government laid down for the new Board were: first, get the maximum production possible and encourage investment and development; second, get a fair return for the public, as owners of the resource; and third, eliminate waste, so far as that may be physically possible. [ERCB 1987: 5]

The first three person Board and seven employees began work on 2 July of the year 1938, operating out of downtown Calgary. There were other factors involved in setting up the Board, notably Alberta's oil production was greater than demand, and there was a need to be equitable with both large and small producers.

The EUB operates under the Alberta Energy and Utilities Act. The mandate of the EUB is:

- to provide for the appraisal of the reserves and productive capacity of energy resources and energy in Alberta;
- to provide for the appraisal of the requirements for energy resources and energy in Alberta and of markets outside Alberta for Alberta energy resources or energy;
- to effect the conservation of, and to prevent the waste of, the energy resources of Alberta;
- to control pollution and ensure environment conservation in the exploration for, processing, development and transportation of energy resources and energy;
- to secure the observance of safe and efficient practices in the exploration for, processing, development and transportation of the energy resources of Alberta;
- to provide for the recording and timely and useful dissemination of information regarding the energy resources of Alberta;
- to provide agencies from which the Lieutenant Governor in Council may receive information, advice and recommendations regarding energy resources and energy. [ERCB 1994d: 1-1]

With these broad principles as a guide, the EUB regulates all of Alberta's energy resources. Only a few of the many applications that the EUB reviews actually proceed to public hearings. Most applications are routine, whether they be for sour gas pipelines, for a well, or for plant expansion. In recent years, the following figures represent the applications processed, and how many of these applications ended up in public hearings. (These figures are from an interview with two of the members of the EUB and are rough estimates).

1995: 18 000 applications: 25 hearings
1994: 20 000 applications: 23 hearings

The Board was originally designed to deal with technical and engineering problems. Prior to the 1970s, EUB hearings involved only the proponents or opponents of particular projects from industry. Special interest groups and individuals became

involved in the mid-1970s. The EUB has changed to accommodate these groups. Inclusion of a broader sector of society requires the EUB to have greater flexibility on issues that can be presented.

Snider and Yates (1995) argue that regulatory agencies were created to:

- reduce the workload of increasingly overburdened legislators;
- develop cumulative expertise through specialization, and
- de-politicize the regulatory process, thereby permitting delegation of politically unpopular decisions. [Snider and Yates 1995: 309]

A public hearing allows for an open public testing of technical, environmental, social and economic evidence from any individual or party that has evidence to enter; "a hearing is held if there is valid objection to an application or if the Board considers one necessary" (ERCB 1987). The EUB holds public hearings at a convenient time and location for those who are directly affected. Notification of a project is given to anyone who may be directly and adversely affected by a proposed energy project. In the case of oil and gas wells and pipelines, the company contacts the landowner directly. For larger or more sensitive projects, such as sour gas plants, the company is encouraged to hold open houses or meetings to explain its plans and to answer questions from citizens. To notify those not directly affected, public notices are published in newspapers so that people have a chance to respond to the Board. If written objections are made which cannot be easily resolved, the Board may call a public hearing to consider all points of view. In recent years, the EUB has encouraged public consultation, negotiation and mediation to resolve differences between residents and companies in the early development of energy projects.

In the 1970s, "the Board came to recognize the imbalance, in both knowledge and resources, available to members of the public who were participating in public hearings" (ERCB 1987: 18). They compared public resources with those available to industry and government and concluded that average citizens would need financial assistance if they were to participate effectively in the Board's public hearing process. In 1978, new legislation was introduced, requiring the project applicant to pay the expenses of local intervenors at public hearings. To qualify for such funding, a person must be:

- occupying, or
- entitled to occupy, or

- having an interest in land which may be directly and adversely affected by a decision of the Board concerning the matter before it. [ERCB 1994d: 2]

Once a public hearing is concluded and the Board has listened to the evidence of all intervenors, a decision is made. The Board makes positive decisions on an application only if they are satisfied that the proposed facility will:

- have as few adverse effects as possible on people and the environment;
- recover as much of the energy resource as practical;
- operate efficiently and minimize waste;
- be safe;
- conform to Alberta Government regulations, and
- be in the overall interest of Albertans. [ERCB 1993: 7]

Decisions are binding and can be challenged in a court if someone believes the Board made an legal error or did not have the jurisdiction to make a decision.

At the opening of Unocal gas plant hearings, Chairman Frank Mink stated that "among other things, the Board has been charged with considering and approving those energy facilities that it finds to be in the Alberta public interest and only those facilities. The purposes of the legislation and of the ERCB Act confirms the Board's jurisdiction to have regard for, among other things, the social and economic effects of a project or a facility on the environment" (ERCB 1994d: 20).

THE LUBICON CREE NATION

The Lubicon Cree Nation has been asked by industry and the government of Alberta to accept a sour gas plant on their traditional hunting and trapping territory. From the perspective of the Lubicon, this is one battle of many against industrial and governmental incursions on their land. This plant, according to Fred Lennarson, an advisor to the Lubicon, represents a special threat as it and clearcutting are the two industrial activities that are the most threatening to the land base and culture of the Lubicon. The Lubicon were bypassed by the Treaty Commissioners in 1899, and effectively excluded from the treaty rights given to other indigenous peoples under Treaty 8. Since 1939, the Lubicon have been in and out of federal and provincial courts attempting to attain land for a reserve and compensation for what they consider to be

irreparable damage to their way of life. Lubicon land claims rely on a contested jurisdiction. Unocal says that it legally bought the rights to subsurface resources from the province of Alberta. The provincial government in return, received the land from the Canadian government. The federal government says it received the rights to the land through the 1899 Treaty 8 negotiations. However, the Lubicon indicate that they were not party to this agreement, and thus hold unextinguished aboriginal right to the land.

In 1983, Judge Forsyth presided over a Lubicon attempt to gain an injunction against industry involved in their lands. The Lubicon argued against ten defendants, but Forsyth decided that no form of interim injunction was warranted.

> The evidence of life style being affected is limited to a few individuals who hunt and trap .... This is not a case of an isolated community in the remote North where access is only available by air on rare occasions and whose way of life is dependent to a great extent on living off the land itself. The twentieth century, for better or for worse, has been part of the Applicants' lives for a considerable period of time. [Goddard 1991: 113]

The decision, said Nigel Bankes, a law professor at the University of Calgary, "suggested that native people must fit the noble savage image to have rights. In an independent assessment, published by the Canadian Institute of Resources, he said the case showed that aboriginal peoples of Canada have rights so long as they remain in a fossilized or primitive state, but their rights are progressively diminished to the extent that they avail themselves to the benefits and burdens of the twentieth century" (Goddard 1991: 114).

In 1984, the Lubicon Lake Band complained to the United Nations Human Rights Committee in Geneva that their way of life and culture were being threatened by industrial development in northern Alberta. In May of 1990, the Committee agreed that the Band complaint was valid and noted that Canada is violating the rights of the Lubicon, until the matter is resolved. They noted that Canada had offered to rectify the situation through a negotiated settlement that was appropriate under Article 2 of the International Covenant on Civil and Political Rights, however, no settlement has been attained.

Their work towards land claims has taken the Lubicon to many different forums. They have fought in the federal courts against resource extraction crown corporations (Petro-Canada), and in the provincial courts, against the provincial government and oil

companies. In October of 1988, the Lubicon and supporters blockaded the highway from Peace River, Alberta, and other oil patch roads (resulting in twenty-seven arrests), and they later launched a boycott against the Winter Olympics in Calgary.

These pressures on the government resulted in the negotiation of the Grimshaw Accord (1988) between Premier Getty and Chief Ominayak. The premier

> was prepared to transfer 246 square kilometres of land - 205 kilometres with mineral rights, 41 kilometres with surface rights only - to Canada for the band's reserve. While bowing to the Lubicon demand that this amount of territory be set aside for the reserve, the premier protected provincial jurisdiction and established industries in several ways. [Pratt and Urquhart 1994: 118]

The Lubicon are still trying to reach an appropriate agreement with the provincial and federal governments.

In an Independent Commission on Settlement, a non-partisan, self-supporting group of university professors, professionals and non-profit groups, convened to find new ways to attain an agreement. At this meeting, Chief Ominayak described himself, his community, and the pressures facing them:

> I'm just a poor bush Indian from northern Alberta. I think I can say that for the rest of us. We've seen a lot and we've been under a whole lot or pressure from many different peoples, especially in the oil field and also forestry, the logging companies, and all these things. Our people lived off the land for many, many years. All of a sudden they found oil and we were in the way. That brought a lot of social problems to our community. [Lubicon Settlement Commission 1993: 3]

Since a road made it through to the community, Little Buffalo in 1979, there has been a tremendous increase in exploration by corporations.

> We go in there today and what do we see -- either a pump jack or a power line or a major highway that's been put in .... Then it's just been reducing and reducing all that our people are dependent on. For example, the different berries we used to pick, we go there today and there stands a pump jack. In one case there's a big battery station where they've got a major camp where they separate the crude from the water and all this. So that's there. That's gone. That holds true with our medicine, our herbs and stuff. A lot of them we can't even get within our traditional territory any more. [Lubicon Settlement Commission 1993: 13]

The dependence that the Lubicon have on the land is disrupted by industry and oil development. Goddard, a researcher who spent time with the Lubicon, observes that the effect on the moose populations have been noted locally.

> Moose kills for the community numbered more than 200 the year before the boom. The numbers dropped steadily to 110, 101, 27, and down to 19 by 1983-84. With trapping gone, there was almost nothing to turn to but welfare, which rose from 10 per cent of the work force to 90 per cent during the same four years. [Goddard 1991: 77]

In the Independent Commission on Settlement, Chief Ominayak indicated that for all of the resource development in the area, the community has seen no return:

> With the billions of dollars that have been extracted by way of natural resources off our traditional territory, there has not been a red cent that has come back to the community other than welfare from the federal government. [Lubicon Settlement Commission 1993: 18]

The Lubicon have made many concessions to allow industry to maintain a presence in the area. For example, in choosing the area for the Grimshaw Accord, they avoided land with pumpjacks or pipelines. However, the Lubicon maintain the sour gas plant cannot operate in their traditional hunting and trapping area, nor so close to the proposed area in which they will settle once the land claims are successfully negotiated. The plant site is located adjacent to some of the most productive agricultural land within the proposed reserve.[5]

At the time of writing this thesis, pressure is still on Unocal to discontinue the plant. The Friends of the Lubicon declared a boycott, in conjunction with the boycott on Daishowa on Unocal in September 1995. The Sisters of St. Francis School, a U.S. based Catholic order of nuns, used its seven thousand shares in Unocal California to force a debate on the gas plant. Seven thousand shares constituted enough shares to get an issue into the annual stockholders general meeting agenda in 1995. The Sisters, acting in the capacity of mediators, accompanied Mr. Perschon, the President of Unocal Canada, to Little Buffalo in the fall of 1995 to meet with the Lubicon. Another meeting was called in New York on May 15, 1996 to discuss a resolution of the Lubicon situation which the Securities Exchange Commission has ruled has to be entertained at Unocal's Annual General Meeting on June 3rd, 1996.

---

[5] Please see Appendix 2 for more history on the Lubicon Cree Nation.

UNOCAL CANADA

Unocal Corporation is a Canadian affiliate of a California based company (Union Oil). Unocal is a fully integrated worldwide energy resource company, principally engaged in the exploration, production, transportation and sale of crude oil and natural gas and the manufacture, purchase, transportation and marketing of petroleum products. Other Unocal operations involve geothermal resources, agricultural products, carbon and minerals, pipelines and real estate sales and development. In 1995, Unocal reported net earnings of $260 million. This compares with a net loss of $153 million in 1994 (Unocal 1995: 6). Unocal Canada has 180 employees and has been actively involved in exploration and development of properties in B.C., Alberta, Saskatchewan, and the NWT. In 1996, the company is emphasizing development of new projects overseas (Southeast Asia) and increasing foreign oil and gas production.

Unocal has been involved in gas and oil exploration in the Slave field in northern Alberta since 1976; they have been operating at the field since 1981. Unocal constructed an oil battery station and a facility to remove sweet gas from the oil in 1978. In 1993, Unocal made plans to install a sour gas processing plant within the existing facility. In addition to recovering gas that was being flared, the upgraded facility also allows Unocal to process sour gas that cannot be processed in the original plant (IRRC 1996: 2). Unocal reports that the plant's sulphur emissions consistently have been less than half of the permitted level of 2, 000 pounds/day. Unocal says that the average concentration of hydrogen sulphide in the gas is approximately 150 parts per million and that no sulphur is manufactured (IRRC). A typical sour gas feed stream may have a concentration of 25 % H_2S or more in plants that actually manufacture sulphur, according to Unocal (IRRC 1996: 2). The Unocal gas plant in the Slave field has been operating since April 1995.

The Board review process was initiated when Unocal applied to the EUB to alter and expand this already existing sweet gas plant. Unocal followed the specified procedures for this application. A notice was published in the *Peace River Gazette* and affected parties had thirty days to respond to it. Unocal also contacted those directly affected (Lubicon) and requested permission to build. Two meetings were held at which Unocal distributed handouts about the changes to the gas plant, but these handouts did not

directly mention sour gas. Unocal representatives felt they had made every reasonable effort before the public hearings to prevent conflict. By the time the subsequent hearings had begun, Unocal stated that they were in no position to compromise as they had already committed more than $10 million to the project and finished 90 per cent of the plant construction.

At the hearings, Fritz Perschon, President and General Manager of Unocal Canada, stated that "many of these concerns were only raised after Unocal had received EUB approval and the project was substantially completed ... perhaps the most important fact I have to communicate to you today is that Unocal may not even have sought Board approval for this project had it not thought it had concurrence of the Lubicon" (ERCB 1994a: 133). Management says "it has unfortunately become caught in the middle of the Lubicon's decades-old land rights dispute with provincial and federal authorities" (IRRC 1996).

The conflict is ongoing between Unocal and the Lubicon. At the May meeting in New York hosted by the Interfaith Coalition for Corporate Responsibility between Mr. Perschon and Lubicon members, the Lubicon maintained that the plant must be moved 13 miles to the south, or shut down. Perschon maintains that the plant will not be moved unless it can be shown that it represents a threat to health and the environment (Mimir Corporation 1996).

CHAPTER III: LITERATURE REVIEW

INTRODUCTION

Several bodies of literature offer a theoretical framework for understanding the conflict between Unocal and the Lubicon. The first, risk management, relies on developing acceptable tools for assessing risks, consistent ways of communicating risks and methods of resolving disputes that develop. Studies of risk have two significant drawbacks. The dichotomy of experts and the public that commonly orients risk management masks the realities and context of aboriginal communities in Alberta. Secondly, risk communication and management attribute conflict to problems of misunderstanding between these experts and the public. Conflicts may have more at root than miscommunication, such as cultural differences, identity related issues or economic benefits.

The field of conflict resolution concentrates on sources of conflict and resolutions. In recent years, processes and assumptions in this field have been challenged to recognize cultural and power differentials between cultures. Cross-cultural models that can account for factors such as the particular backgrounds of industry and the community, the motivations of the parties in dispute, and the general cultural frameworks within which the various parties operate (Salem 1995) better explain the origins of conflict. These models are suited to situations where power inequalities between the parties are present or when a conflict over important material interests concerns a group's central values and identity (Ross 1995).

The frameworks of risk management, communication and dispute resolution are all outlined in the beginning of this chapter. Using this as a base, cross-cultural communication and conflict resolution is then introduced. Cross-cultural perspectives are fresh developments to the fields studies of risk and are still piecemeal in their approach to communication and conflict. However, these are the most useful models for assessing the conflict between Unocal and the Lubicon, and the subsequent management of this conflict by the Energy Utilities Board. This chapter concludes with a review of traditional knowledge, its relevance for risk management and current initiatives for incorporating it.

RISK MANAGEMENT

Risk management is an interactive process of designing, planning and negotiating, aimed at reducing identified risks to levels which can be tolerated by potentially affected parties or by society overall (Hrudey 1994). In an ideal sense, it is a process of managing risks and benefits equitably. Some basic tenets of an acceptable risk management strategy in a liberal society are (Brunk et al. 1991; Leiss and Chociolko 1994):

- it cannot be capricious or arbitrary;
- it must rely on a clearly articulated rationale;
- it must be consistent;
- the strategy cannot be biased in favour of one group over another;
- it must protect the public from unsafe actions, and
- sound risk management must rely on the best available scientific data.

A variety of technical procedures for managing risks are now established: cost-effectiveness analysis, risk-benefit analysis, benefit-cost analysis, and socio-economic impact analysis (Leiss and Chociolko 1994).

Defining risk

Risk, for the purposes of this discussion, represents the chance of a set of circumstances leading to adverse consequences. Accordingly, risk management may involve actions to modify one or more of: the chance, the set of circumstances or the degree of harm. Environmental risk refers to some concept of harm to the environment (Hrudey 1994: 4).

Kaplan and Garrick (1981) have argued that risk is too complex to be represented by a single number and should instead be seen as a triplicate in response to the following questions:

- what can go wrong?
- how likely is it?
- what are the consequences?

Fischoff, Watson and Hope argue that the choice of a definition is a political one, "expressing someone's views regarding the importance of different adverse effects in a particular situation" (1993: 31). The choice of definition can "affect the outcome of policy debates, the allocation of resources among safety measures, and the distribution of political power in society" (Fischoff, Watson, Hope 1993: 30). This view, that the management of risk is inevitably a political process, is encountered consistently throughout the literature. For example, Brunk,

Haworth and Lee argue that because processes such as risk assessment cannot avoid being guided by values and risk management must make trade-offs, these forums are political debates (Brunk et al. 1991).

Risk assessment

The assessment of any given risk is one stage in the process intended to evaluate the nature and, if possible, the quantitative character of risks for any particular activity or circumstance (Hrudey 1994: 4). It was originally conceived to aid engineers in estimating probabilities of adverse events. In an attempt to depoliticize risk assessment, the process was separated from risk management by the U.S. Environmental Protection Agency (NRC 1983). However, the original distinction between the processes of risk assessment and management has proven more difficult to maintain than originally conceived.

This model of risk assessment, designed to separate values from science, is discussed by Brunk, Haworth and Lee (1991) who argue that studies of risk cannot be neutral and objective. Attempts to make it seem so are understandable because a fair risk management strategy requires reliable risk assessments to underpin regulatory decisions. Douglas (1992) suggests a reason for this: "in the present circumstances the appeal to science is made because of the absence of respect for any adjudicator" (1992: 27). Social science critiques of risk assessment have shown that because uncertainty is high, time constraints are tight and decisions are being made in highly charged political atmospheres, risk assessments do not strictly approximate objective scientific studies (Brunk, Haworth and Lee 1991). A consensus has emerged that risk debates are inherently political (Leiss and Chociolko 1994).

Challenges to risk management

Ruckelshaus, formerly the administrator of the U.S. Environmental Protection Agency, states that "risk assessment is necessarily dependent on choices made among a host of assumptions, and these choices will inevitably be affected by the values of the choosers, whether they be scientists, civil servants, or politicians" (1990: 111). So too is the management of risk guided by the values of the managers, the civil servants and the politicians who use the best-available scientific information to make choices. In its broadest sense, Ruckelshaus

defines risk management as "the distribution of current resources to shape some desirable future state ... adjusting our environmental policies to obtain the array of social goods - environmental, health-related, social, economic, and psychological - that forms our vision of how we want the world to be" (1990: 113).

The challenge to risk management lies in acknowledging that these processes are not value free. Those that manage the process make political decisions about what is desirable and about who must bear the consequences of development. Research in the area of environmental equity has shown that some risks have been unfairly allocated to minority groups (Bullard 1992). Further, visions of what social goods are desirable are likely to differ from group to group. Likewise, perceptions of risk and its effect on a group will vary.

Environmental equity

In principle, the regulatory agency provides a mechanism for the collective decisions that must be made on acceptable risks (Derby and Keeney 1990: 49). However, the reality of risk allocation may be related to economic or ethnic factors. Robert Bullard states "the distribution of people involved in public participation in environmental policy does not reflect the distribution of the burden of risk" (Bullard 1992). Local and state studies in the U.S. have revealed an association between the siting of hazardous waste or chemical facilities and the ethnic or economic status of surrounding communities (Bullard and Wright 1989). Bullard defines environmental racism as "any policy, practice or directive that differentially affects or disadvantages (whether intended or unintended) individuals, groups, or communities based on race or color" (Bullard 1994: 1037). Bullard argues that "if we are to address broad public health issues, we must modify the assumption used in risk analysis. These assumptions need to take into account factors of race and ethnicity, cultural differences, and regional differences" (Bullard 1994: 1049). Similar studies have not been conducted in Alberta. Nonetheless, perceptions of the fairness of risk allocation in areas will be relevant to how a regulatory body is viewed by different groups.

Culturally based risk perceptions

Risk managers and communicators have generally conceived of two discrete populations, those that assess and manage risks (the experts) and those to whom studies are communicated (the public). According to Leiss and Chociolko, risk management is controversial because individuals feel that they are powerless to "control their exposure to the chance of unfair and uncompensated loss" (1994: 8). While this statement may explain why there is disagreement about options for risk management, it is based on an assumption that different individuals have the same needs and fears (Leiss and Chociolko 1994).

According to Leiss and Chociolko, in the sphere of environmental and health risks loss may relate to three areas: health and well-being of individual and family (adverse physical or physiological consequences, including death), prosperity of individual and family prosperity (loss of future opportunity for career and income), and social well-being (exposure to large-scale risks, originating in nature or society, that cannot be controlled by available technologies) (Leiss and Chociolko 1994: 8). While these factors partially explain individual or group reactions to risks that are imposed on them, they are based on a specific cultural reaction to risk. They do not encompass such aspects as loss of cultural identity or effect on spirituality. In my study, in order to explain aboriginal reactions to risk, such factors must be considered.

Acknowledgement that different cultural groups react differently to the same risk was first explored in detail by Douglas and Wildavsky (1983). These authors argue that "standing inside our own culture, we can only look at our predicament through our culturally fabricated lens" (1984: 194) and that "dangers are selected for public concern according to the strength and direction of social criticism" (1984: 7). This perspective shows that each culture selects what risks are important to them and what remediation is appropriate.

Using such diverse examples as nuclear power plants, infectious diseases and pesticide residues in food, Vaughan and Nordenstam (1991) provide evidence that ethnicity, gender, socio-economic status and educational level influence perceptions of the effects of environmental risks. Curtis (1992) argues for a culturally specific assessment of individual and societal needs. She works with socio-cultural groups who have strong ties to their land. Risk impacts that may affect aboriginal populations are not encompassed in standard risk management. To make risk management specific to the communities she works with, Curtis

suggests that the risk of loss of culture should be accounted for in environmental risk assessment and management. Cultural risk is defined as the loss a community faces when their traditional land base is harmed by, for example, a spillage of hazardous materials. Adverse impacts on aboriginal populations may include such factors as loss of identity, undermining of belief systems, reduced quality of life and cultural extinction (Curtis 1992). These impacts are related to social and economic changes in cultures (i.e., increased alcoholism, increased poverty). The adverse effects of the same spill on a upper middle class group may be quite different. Curtis' work illustrates that current risk management models must begin to be accountable to different cultural groups and their ways of perceiving risks.

RISK COMMUNICATION

Risk communication is an essential element of risk management which should represent a two-way educational process between those who have assessed the risk and potentially affected parties (Hrudey 1994: 4). Models of risk communication vary from one-way transfers of information to participatory models. In this discussion of risk communication, I will refer to Ann Fisher's model (1991), which places communication on a continuum from informing to empowering the public (See table 1). In this section several models of risk communication are reviewed. In general, neither a cultural nor an individual differences approach has been integrated systematically into risk communication models (Vaughan and Nordenstam 1991). As a result, risk communication models are often ineffective in cases where these factors are relevant. The most useful model for cross-cultural risk communication processes must take individual and cultural factors into consideration. It also must acknowledge that conflict may be inevitable, and that even an extremely effective risk communication process may not resolve conflict, as there may be deeper roots to a conflict than simple misunderstanding (Stern 1991).

There are no risk communication models in the literature that contend with the complexity of communicating risks across linguistic, perceptual and cultural gaps. This conclusion is supported by recent studies (CARC 1995; Usher et al. 1995). Research with aboriginal communities in northern Canada regarding mining and contaminant episodes reveals that "one of the truly significant issues is the lack of notification, consultation and consent for

exploration and development" (CARC 1995: 3). This may relate to lack of intent to communicate, but also to differences in the way that communication occurs among cultures. This study identifies broad support among aboriginal organizations and communities for new and imaginative approaches to the re-design of the policies and regulations for access and use during exploration and development. Fisher's continuum provides a map of the development of risk communication, beginning with one-way communication transfer models to two-way dialogue between experts and the public.

Table 1. Perspectives for communicating about risk, adapted from Fisher, A., 1991

←——————————————————→

One-way communication	Giving them information about estimated magnitudes	Giving them information about estimated risk magnitudes	Two-way dialogue
Telling them what has been decided or done			Including their concerns in the risk assessment
	Letting them interpret it and decide on their own	Helping them interpret it without interjecting bias	Helping them interpret the results and helping them use ways to effect the decision
Telling them what to do		Letting them decide on their own	

Information transfer models

Risk communication models were originally conceived as one way transfers of information from the experts to the public, with the end goal of encouraging behavioral change or acceptance of a proposed development by the public. Rejection of a designed message is generally interpreted as misunderstanding (Fisher 1991). Risk communicators and scientists commonly believe that if people perceived the costs and benefits of the alternatives more accurately, or if the risks were more effectively communicated, conflicts about risk management options would be easier to resolve. In the extreme, risk management programs that believe the public is just misinformed may not encourage public participation, or only do so in a manner known as 'decide, announce, defend'. Those that encourage public participation generally aim to teach the public to think like them so that they can understand the 'real' risk.

Stern (1991) claims that information transfer models have at least four serious deficiencies when dealing with real disputes. The first is a failure to appreciate that such conflicts are embedded in a democratic system and are not simply misunderstandings. The second is that this formulation treats the nature of knowledge as politically problem-free. It assumes that risks can be assessed and the assessments explained in a value-free and politically neutral manner. As Brunk, Haworth and Lee (1991) have shown, the process of assessing and managing risks is not value-free. The third deficiency is the assumption that net risks to human life and health are the only important issues to the public in technological disputes. Plough and Krimsky have shown that the public has different criteria for evaluating risks than do experts, such as risk acceptability, fairness and personal impact (1990). Stern attributes the final problem to an implicit misunderstanding of the nature of communication. He suggests that risk communication is a type of political discourse, not just information transfer. The task of information transfer models is to educate the public about the expert's concept of 'real' risk, hence the issues are cast in a technical language, leaving little possibility of dialogue between the public and the technical elites (Plough and Krimsky 1990). This model naively seeks to depoliticize debates. Stern also suggests that conflicts about technology are not simply based on misunderstanding, but may be deeply rooted in social conflicts. He suggests further that "conflicting messages are inevitable in technological controversies, and would be, even if scientists agreed about what is known" (Stern 1991: 100).

Consultation models of risk communication

A range of models and approaches are found in this area of risk communication. These models lie in the middle of Fisher's continuum (1991), and often are prescriptive in nature. Advice is action-oriented and in favor of citizen participation in risk communication processes. Participatory approaches are supported because they would appear to offer better, less controversial and less divisive decisions (Covello et al. 1988). These models represent the process of risk communication as a two-way exchange of interests, ideas and information. Some major lessons from risk communication practice include:

- articulate goals of process (Fisher 1991)
- listen to your audience (Covello et al. 1988)
- be honest, frank and open (Covello et al. 1988)

- timing of information transfer is key (Kasperson 1986)
- release information frequently (Pavlova 1993)
- co-ordinate and collaborate with credible sources (Covello et al. 1988)
- meet the needs of the media (Covello et al. 1988)
- include the public's concerns in the risk assessment (Fisher 1991)
- recognize that members of the public differ in arenas and scope of involvement (Kasperson 1986)
- information may come from many sources (Fisher 1991)
- risk evaluation is key to future communication (Fisher 1991)
- effective public participation depends substantively upon the development of indigenous technical and analytic resources and upon institutional means to act upon increased knowledge (Kasperson 1986)

This list is far from exhaustive, but these considerations provide foundations for risk communication.

These consultative models do not achieve a number of important ends. While they encourage public participation, appropriate mechanisms for participation of minority groups are not articulated, nor is representation of minority groups explicitly considered. Also, although Kasperson (1986) describes a range of members of the public (inactives, voting specialists, parochial participants, communalists, complete activists) these typologies are limited. The Environmental Protection Agency's *Handbook on Public Involvement* also uses the factor, 'level of involvement' (EPA 1990: 26) to categorize the public. These typologies do not consider economic status, gender or ethnicity.

Generally, these models assume the public will have little or no contribution to make to a risk management process. This is apparent in Fisher's model, as she advocates incorporating community concerns (1991); her continuum fails to consider that traditional or local knowledge may exist. Other than Kasperson, no models discuss the existence of relevant information and knowledge outside of the expert sphere. Kasperson writes, "the ability of risk bearers to respond to risk communication and to engage in a consideration of risk depends, upon the existence of technical resources and contexts in which the individual, social groups and the communities can enlarge their analytical and communication capabilities" (Kasperson 1986: 278). He assumes risk bearers require training to meaningfully contribute to risk communication and management processes. An information transfer model undervalues lay

perceptions and local knowledge; as a result, community knowledge is neither heard, nor used, possibly alienating groups from the process (Wynne 1992).

These lessons from risk communication only address negative experiences with the media. Covello, Sandman and Slovic (1988) write that "the media are generally more interested in politics than in risk; more interested in simplicity than in complexity; and more interested in danger than in safety" (Covello et al. 1988: 3). Instead of typifying the media, it might prove more useful to analyze what forms of media are relied on according to factors such as gender, ethnicity and socio-economic levels. Johnson, Fisher, Smith and Desvousges found that specific groups have a different response to the same message, which "may indicate the need for specially targeted materials and delivery vehicles" (1990: 256).

Better risk messages do not guarantee conflict resolution

Successful resolutions of risk management processes are defined by Peelle as outcomes that "reduce conflict between stakeholders and agency proponents and which result in lasting decisions" (1990: 4). Research and experience indicate that formalized risk communication processes are not sufficient to guarantee successful resolution of community risk concerns. Although effective risk communication may occur, a dispute may still arise because of fundamental differences. Conflict management strategies have been articulated to address this reality.

DISPUTE RESOLUTION

Risk communication may not resolve a dispute among different groups. Hence, disputes may proceed to a formal level, some form of conflict management, either negotiated or determined by an external agency. In Alberta, the EUB manages energy resource disputes through public hearings, public consultation and mediation. Those affected by a proposed development have a wide range of options to communicate their support or disagreement with a project to the Board or industry. A community may choose to participate in an established process, ignore the process or to obstruct process through civil disobedience. Options open to industry, communities and the EUB are outlined in the beginning of this section. Consensus

processes (mediation, negotiation) are currently supported as a means to resolve resource disputes. Leiss and Chociolko (1994) outline a prescriptive model for consensus processes which assumes that the population has similar needs and is affected by risks in a sufficiently similar manner to allow consensus to be achieved.

In cases of dispute over energy resources, risk managers may find that alternative processes to the quasi-judicial setting may produce sustainable and less controversial agreements. Morgan criticizes the adversarial model of dispute resolution, for "it can consume enormous effort. It often is not a reliable way to lead to a full, clear exploration of the system involved or to adequate treatment of uncertainty. And it often does not produce results that are consistent from problem to problem" (Morgan 1990: 277). Fiorino argues for "greater use of negotiation and mediation in environmental decisions, in which the consent of the affected parties is a condition for resolution of policy issues" (Fiorino 1989: 297). This trend is highlighted in Leiss and Chociolko's book (1994). They ask that everybody abandon unreasonable risk averse stances, such as demands for zero-risk, and come together to negotiate in frank and open exchanges. For the case studies that they analyze (alar and antisapstain chemicals), this may be an appropriate plea, but it has not been shown that consensus approaches to environmental risk disputes can succeed in cross-cultural cases (McKenzie and Sandler 1995).

These researchers (McKenzie and Sandler 1995; Leiss and Chociolko 1994; Granger Morgan 1990; Fiorino 1989) are dissatisfied with current risk management practice, its zero-sum outcome and its inadequacies for resolving disputes over resources. Dispute resolution, or alternative dispute resolution (ADR), is a field embodying principles of interest-based negotiation in generating consensus. Several options are included under the ADR umbrella, including mediation, negotiation, conciliation and arbitration.

Options available for dispute resolution

Each group involved in a project, whether a regulatory body, industry or community, has both formal and informal channels open to them in order to resolve a dispute. Some of these options will be outlined in this section with a view to reviewing the benefits and strengths of each option.

Table II: Range of Conflict Management Processes

Decide / Announce
Consultation
Citizen Participation
Negotiation
Facilitation
Mediation / Arbitration
Arbitration / Hearings
Litigation
Civil Disobedience
War

There is a range of community involvement strategies ranging from tokenism such as informing, consultation, and placation to degrees of direct influence based on citizen power, including partnership or negotiation, delegated decision making, and control (Arnstein 1969).

An option outside of formal channels established by industry or government is civil disobedience. Civil disobedience has been a tactic used across Canada by aboriginal groups in order to heighten awareness of their conditions and to spur government action. Many events in recent years have brought aboriginal issues into focus, such as Kahnesetake (1990), Gustafson Lake (1995), and Ipperwash Provincial Park (1995). While these disputes are all related to land claims, disputes over development have also occurred. In February 1996, the Janvier Band of northern Alberta blockaded oilpatch roads. Civil disobedience may force a response from the government (as in the speedy negotiation of the Grimshaw Accord in 1988 after the Lubicon blockade of oilpatch roads), but it may also alienate support for aboriginal groups from more moderate sectors. Native groups have also relied on land rights and environmental legislation to block development projects they deem to be harmful (Feit 1986).

Administrative hearings and arbitration are both processes in which quasi-judicial third parties make binding decisions after listening to the disputing parties. Bases for appeal to administrative judicial bodies are very limited. The process is often adversarial and may end in a win or lose decision. In an adversarial process, the third party can make recommendations which can influence future relations between disputing parties. For example, in the case of the

Husky application to the EUB for well licenses (1994), the EUB wrote that they "expect Husky to honour the commitments made at the hearing with regards to well testing procedures and ongoing public consultation, particularly with the Tsuu T'ina Nation" (ERCB 1994f: 16). Nonetheless, it is difficult for aboriginal groups to pursue their own issues and needs within the framework of regulatory hearings.

This conclusion is supported in *Winning Back the Words* (1993), where the authors argue that public participation in public hearings constitutes a form of resistance. In their review of the 1991 public hearings regarding the Alberta-Pacific pulp mill near Athabasca, they argue that challenges to the political order occurred in various forms: "struggles between experts, struggles between lay people and experts, struggles over who can speak with authority on a subject, struggles over the meanings of words and concepts, struggles over values" (Richardson, Sherman and Gismondi 1993: 22). In this case, members of the public challenged and resisted the current order, but they were unable to halt the progress of the pulp mill or to achieve their own ends through the public hearings process.

In mediated negotiations, participants are committed to seeking a mutually acceptable resolution of their differences which they then formally commit themselves to implement and support. Negotiations are shared decision-making on a defined set of issues for a specified period of time. Part of the commitment to joint decision-making is the understanding that, should an agreement not be reached in the agreed upon time, each party is free to pursue their own interests as they see fit.

The application of negotiation-based approaches to reconcile conflicting interests in respect to land use, resource allocation and environmental issues has moved beyond isolated initiatives to legislated mandates. In British Columbia, a Commission on Resources and the Environment (C.O.R.E.) was established in 1991 to deal with major land use and resource allocation questions in the Province. The new Environmental Assessment Act of Canada provides for the use of mediation in the assessment process as an alternative to a hearing panel, or as an adjunct to it. The 1994 Whitehorse Mining Initiative Accord, signed by industry, aboriginals, governments and environmentalists provides for public participation (CARC 1995: 4). Negotiation occurs when two or more groups enter into a direct exchange, typically involving face-to-face meetings, with the goal of finding common ground. It is based on the

understanding that an agreement will involve a commitment to act within the terms of that agreement. Negotiation is a form of shared decision-making.

Facilitation refers to the task of managing discussions in a joint session. A facilitator may be used in any number of situations where parties of diverse interests or experience are in discussion, ranging from scientific seminars, to management meetings, to public forums.

Focus on consensus approaches

Consensus is defined as the general agreement of all parties to a decision. In some cases, acceptance is substituted for agreement, implying a lesser level of enthusiasm for an outcome. A process designed to achieve consensus aims at probing participants for their interests, rather than their positions. "Interests are needs, desires, fears - the things one cares about or wants. They underlie people's positions - the tangible items they say they want" (Ury, Brett and Goldberg 1988: 5). Ury, Brett and Goldberg argue that reconciling interests rather than positions works because for every interest, there may be several possible positions. Rather than compromise between entrenched positions, the mediator can probe for the common interests that underpin a position. This approach can lead to unexpected solutions to disputes, unlike a win or lose adversarial model.

Susskind and Cruikshank recommend the following conditions for consensus approaches. They must be:

- ad hoc
- informal
- consensual
- face-to-face (involving specially selected representatives of all stakeholding parties)
- supplementary to existing structures
- restricted to distributional issues (not fundamental value questions, or issues of basic human rights). [Susskind and Cruikshank 1987: 77]

Achieving consensus requires new ways of managing conflict. For example, mediators may need to be involved in "...establishing linkages among issues, packaging elements valued differently by the various participants, arranging compensatory actions of payments, and guaranteeing future behaviour. In the end, all parties should gain" (Susskind and Cruikshank 1987: 77). Central to the success of this model is the understanding that negotiation is

intended to find agreements between the conflicting or competing interests - not to defeat or overpower.

Susskind and Cruikshank identify three preconditions for success of unassisted negotiations: "(1) the issues in dispute, as well as the array of stakeholder parties, should be relatively few in number and readily identifiable; (2) the stakeholders must be able to establish sufficient channels of communication to permit joint problem-solving; and (3) the uncertainty surrounding the outcome of unilateral action must be moderately high for all stakeholders" (Susskind and Cruikshank 1987: 133).

Each dispute will differ in scope, substance and process. The following characteristics for disputes are assembled from several sources:

> *Conflict* There must be unresolved conflict with a number of groups that are dissatisfied with existing decision-making processes. [Leiss and Chociolko 1994]
>
> *Incentive* There must be a purpose for engaging in collaborative decision-making processes.
>
> *Stakeholder involvement* Appropriate stakeholders are identified and included. The process should be inclusive, not exclusive, and participation should be voluntary. [CSE Associates 1995]
>
> *Government involvement* The appropriate levels of government need to be present to represent the federal or provincial perspective and to keep decision-makers informed of decisions. [B.C. Roundtable on Economy and Environment 1992]
>
> *Time limits* Time limits must be agreed upon by participants. If agreement is not achieved in the set period, participants are free to pursue their own interests. [Leiss and Chociolko 1994]
>
> *Accepted process rules* Ground rules are the foundation for consensus processes; they ensure that the parties to negotiations have clear expectations regarding the responsibilities of the parties and the process manager. [CSE Associates 1995]
>
> *Full mandate* The parties must be provided the opportunity to participate in defining the problems, identifying options, and seeking solutions. [B.C. Roundtable on Economy and Environment 1992]
>
> *Accountability* Parties are accountable both to their constituencies and to the process that they have agreed to establish. [CSE Associates 1995]

Fallback There must be clear understanding that each party has alternatives for making decisions if agreement is not reached (Best Alternative to Negotiated Agreement); however these are generally less desirable options, hence each party has incentive to participate in good faith. [B.C. Roundtable on Economy and Environment 1992]

Implementation Commitment to implementation and effective monitoring are essential. [CSE Associates]

This framework for consensus negotiations provides a baseline for creating agreements. At a conference held in May, 1996 (Interaction '96: Conflict Resolution Transforming the Future), David Tavender recommended that alternative dispute resolution be used only in the early stages of a conflict. In early mediation:

- Positions may not yet have hardened.
- The investment of cost and time is still relatively low.
- Where facts and information are missing, early mediation can direct the parties to effective ways of filling in information gaps without requiring parties to engage in pre-trial discovery.
- A mediator, as an independent facilitator, can lend valuable assistance to negotiations. Parties on their own all too frequently fall into traps that become barriers to settlement. These include posturing and positional bargaining, communication problems, lack of attention to process and timing details, lack of authority, and, overriding all of these, a failure to identify underlying interests and concerns.
- Even if no early settlement is realized the investment in early investigation and analysis can help to focus subsequent steps required in litigation. [Tavender 1996: 7]

CROSS-CULTURAL COMMUNICATION AND DISPUTE RESOLUTION

Models of risk communication and dispute resolution derive from particular cultural contexts. Ross (1995) warns that "it is not sufficient to assume that well-tried western models ... will work, or can be adapted directly for intercultural encounters" (Ross 1995: 33). Descriptions of culture as a general belief system, a worldview, helps towards understanding the danger of parties misconstruing the behaviours of others through a failure to understand the cultural context in which action occurs (Ross 1995). Cross-cultural models of communication and dispute resolution outline the assumptions and contexts of industry, regulatory bodies and aboriginal communities.

Cross-cultural communication

Cross-cultural communication is communication relating to an issue between at least two parties of different cultural groups. In the risk literature, cultural differences are usually related only to ethnicity. However, cultural differences may be born of ethnicity, gender, social status, economic or worldview differences or other factors. Plough and Krimsky (1990) define a cultural model, but it rests on elaborating the differences between experts and the public. They do not discuss diversity within each group; nor do they recognize commonalties between groups. Vaughan and Nordemstan (1991) have concentrated on diversity within and between groups, due to such factors as ethnicity and gender. Cross-cultural models may aid communicators in designing messages that are more effective. Language differences can lead to misunderstandings that hinder effective management. Under the worst circumstances, open conflict can result. These models may also help parties to identify sources of conflict that are not just related to miscommunication, such as identity issues.

In their model of risk communication, Plough and Krimsky (1990) have broadened the factors distinguishing the decision-making processes of experts and the public. They distinguish between technical rationality (rests on scientific principles, common language, independent of context) and cultural rationality (evaluates risk on broader basis, incorporates technical information into broader decision-making process, context important) and assert that expert and popular approaches to a risk event "can be logical and coherent on their own terms but may exhibit differences in how the problem is articulated, in the factors relevant to the analysis and in who the experts are" (Plough and Krimsky 1990: 229). Plough and Krimsky state that "both forms of rationality must be capable of responding to a process of mutual learning and adjustment. If those from technical backgrounds begin to appreciate and respect the logic of local culture toward risk events and if local culture has access to demystified science, points of intersection will be possible" (1990: 230).

Their model outlines a social context for both experts and the public. Plough and Krimsky argue (similar to Brunk et al. 1991) that risk communication emerges from a context of politics (1990: 230). Broadening the factors associated with each of these groups (experts and public) is useful for interpreting the special status accorded science and the irrationality experts attribute to the public.

Unlike Plough and Krimsky (1990), Vaughan and Seifert discuss diversity within groups, instead of just between experts and the public. Vaughan and Seifert (1992) write, "social conflicts about the management of environmental risks are influenced to a large extent by varying belief and value systems that lead to fundamental differences in the way in which individuals approach or structure policy problems. A successful resolution of many controversies requires strategies that acknowledge, reflect and accommodate the variability within society in those beliefs and values that influence how risk problems are conceptualized" (Vaughan and Seifert 1992: 131). Questions that follow are, what are the sources of variability in the public? And, how do these differences influence the ways that risk problems are conceptualized? (Vaughan and Nordemstam 1991) Risks may be perceived differently by groups that vary in socio-economic or ethnic backgrounds. Douglas and Wildavsky (1983) have shown that culturally based attitudes and values can influence individual orientations towards risk and uncertainty. Vaughan and Seifert (1992) show that individuals from different cultures may have non-equivalent perceptions of risk. In another paper, these sources of variability are outlined. "One of these variables, ethnic background, provides a reasonable starting point with which to explore the nature of variability in risk judgements ... Ethnicity is correlated with certain life situations relevant to risk evaluation, such as access to social resources" (Vaughan and Nordemstam 1991: 31). Other factors that might influence risk judgements and risk communication are gender, socioeconomic status, general beliefs or worldviews about risk and the environment and educational level. Age and personality may also affect the perception of risk.

Other factors that may affect mutual comprehension in a risk communication process are beliefs and behaviours in relation to distance and time, worldview, communicative style, the value placed on communication, language itself or discourse styles. Language differences present almost insurmountable communication barriers, even with translation and interpretation. For example, Watson, Wheeler and Guidotti write of cultural differences that impede the native voice in articulating their problems. "The speaking style of native peoples tends to be perceived by those unfamiliar with it as 'rambling' and somewhat 'vague'" (1992: 1). These kinds of stereotypes may be addressed and altered through cross-cultural familiarization.

The circumstances under which it is appropriate to speak or to be silent differ. For example, Usher et al. (1995) write of the Athabaskan speaker who

> "is likely to remain silent for a longer period in the company of an English speaker out of respect for the individuality of others, and a guarding of his or her own individuality. The English speaker, on the other hand, is likely to begin speaking soon, since speech is a means of getting to know someone unfamiliar. The result may lead to ethnic stereotyping, the English speaker convinced that Athabaskans do not want to talk, and the Athabaskans resolved that the English speakers talk all the time" (Usher et al. 1995: 27).

In reference to Australian Aboriginals, Ross warns, "Never interpret Aboriginal silence as assent. In a face-to-face situation, it may indicate having heard but not being ready to reach a view" (Ross 1995: 39).

When language is shared, there may be differences in information style and meaning which lead to misunderstanding or even conflict (Usher et al. 1995). Scientific terms and concepts do not translate readily into most aboriginal languages. Gamman provides an example: environmental legislation may include words like wildlands, zoning or parks and protected areas. These words have a clear meaning in the North America or Europe, but are often not understood by officials in countries that lack a tradition of carefully controlled land use and conservation (Gamman 1995: 45).

The application of risk communication models in settings across North America is based on a number of culture-bound assumptions. Risk communicators share a common language, a shared universe of meaning and presuppose what Rupesinghe refers to as a 'rationalistic discourse' (1995: 13). "The parties share, more or less, central values based on rational argument ... The conceptual environment within which these conflicts occur is generally supposed to contain a strong ideological imperative of equality and recognition of the rule of law" (Rupesinghe 1995: 13).

A solution to these issues lies in use of cross-cultural mediators, who can help groups get information across to each other. An effective mediator must be: aware of cultural differences and not naively assume that underneath we are all the same; perceive the potency of religions and other cultural resonances; recognize that Western rationality is based on culture-bound values and assumptions, and not assume that something that works for one culture, works for another (Cohen 1993: 35). Another author recommends patient dialogue, self

reflection (understanding one's own culture), avoidance of actions or statements that may be interpreted as cultural arrogance, and establishment of common ground between parties (Salacuse 1993: 202-205).

A case managed by the EUB in Alberta highlights this need for a risk communication model that is more sensitive to variability. In 1994, Husky Oil applied to the EUB to drill five wells near Moose Mountain in Kananaskis Country. The Tsuu T'ina Nation, an aboriginal band near Moose Mountain, criticized the risk communication process used by Husky to advise them of the project. They suggested that the risk communication was inadequate for a number of reasons. The circular announcing the project was not mailed or delivered to the residents of the Tsuu T'ina. Instead, they followed a standard procedure of advertising in a local newspaper. Husky also failed to advise the appropriate people in the band of the project. Further, at meetings with the Tsuu T'ina, Husky emphasized economic opportunities rather than potential impacts of the project on the area which might influence the band. [ERCB 1994f] Knowledge of appropriate media channels for notifying a particular group, band structure, and aboriginal use of the area may have facilitated more effective communication.

This example highlights the importance of community knowledge in an area. In cases such as this, aboriginals may pursue hunting, fishing and trapping in the development areas. The area may also hold spiritual value, or contain burial grounds. A risk communication project which does not support dialogue with a community may never become aware of these issues. Without knowledge of these issues, a corporation may inadvertently alienate an aboriginal group.

Cross-cultural models of communication are needed to enlarge understanding of sources of diversity among groups and commonalties between them. A key to successful communication lies in respecting diversity and understanding cultural conventions and processes which shape communication (Usher et al. 1995: 27).

Aboriginal response to contaminant information

In May 1995, the Inuit Tapirisat of Canada released *Communicating About Contaminants in Country Food* (Usher et al. 1995). In this study, researchers interviewed aboriginals who changed their consumption of country food due to the communication of

health risk information by the government. This study demonstrates the failure of the information transfer model of risk communication to consider the consequences of communicating contaminant information. Aboriginal responses to risk communication involved major changes in diet from country food to less healthy options. While the information transfer and consultative models are strong on regional or national solutions, they do not consider local solutions to problems, and the effect that risk communication may have on a group.

The results of the study are that risk estimates are rarely understood by community residents. Communication of statistical estimates led to what Peter Usher, one of the researchers, referred to as community mercury gossip. This arose in the absence of clearly communicated or understood information about the risk of fish consumption amongst the Grassy Narrows and Whitedog Indian Reserves. This study also concludes that problems of communication are exacerbated by complex jurisdictional arrangements, scientific uncertainty, inconsistency of interpretation and advice and ineffective communication. A focus of the Inuit Tapirisat study is to improve communication of risks across the linguistic, cultural and perceptual boundaries. A few of the suggestions for improved communication about contaminants are:

- Quick and definitive diagnosis of food safety.
- Full disclosure.
- Many community residents also seek a more general understanding of contaminants. Where do they come from? What harm will they do?
- Pamphlets and videos are better than reports, but interactive communication is better (phone in shows, radio, face-to-face interaction).
- Public presentations without interaction are of little use.
- People want information about contaminants in their own language, even when they are fluent in English. However, translation and interpretation of even the most basic technical information and scientific concepts have most often been inadequate and even misleading. [Usher et al. 1995: v]

The prescriptive, consultation models outlined earlier are not specific enough to outline these kinds of communication techniques. While they provide guidelines, they cannot respond to the needs of one culture, or take the subtlety of such factors as translation of technical concepts into other languages into account.

Fogo process

The Fogo process is a communicative technique developed in response to a conflict over land use in Newfoundland. It is included here as an example of an innovative approach to risk communication which may hold promise in circumstances where trust is low and conflict is high. The Fogo process, developed in the 1960s, uses film as a tool to foster community-government relations (Wadel 1969). At all stages the emphasis is to involve the community in the decisions to be made. Community participants select the topics, edit the films, determine the distribution and decide if the films should be seen by others. Participatory film-making allows community members to emphasize their own goals and communicate their messages in a non-adversarial and comfortable environment. The films may then be viewed by government or industry. A limitation is that the films can highlight consensus where it already exists, but cannot bring consensus about as direct interaction and negotiation is limited.

Cross-cultural dispute resolution

The framework articulated for consensus approaches provides a baseline for negotiating agreements. While it is generally accepted, many practitioners feel that there are limitations when this framework is used in cross-cultural context. Although on the surface, a dispute may be about resources, and thus interests-based bargaining may appear to be effective, at the bottom of many conflicts about resources are cultural values. If this key component is missed, technical solutions sought through functional or interests-based bargaining will rarely succeed (Rothman 1995: 19). Cross-cultural approaches which deal with these limitations of the consensus model have emerged in the past few years (Rothman 1995; Ross 1995; LeBaron 1992).

Cross-cultural models: Issues of procedure and perception

Lund, Morris and LeBaron (1994) reveal that current models of consensus decision-making are based on a number of cultural assumptions. They show that the cultural context of decision-making affects how conflict is perceived, identified and approached, what kind of conflict intervention process is selected, the degree of neutrality which is expected or appropriate, and definitions of success and of fairness (1995: 25). There are a number of

issues of procedure that may not cross the boundaries of cultures; in order for a process to be effective, these factors will need to be considered.

The cultural context of decision-making and communication may affect the interaction of groups. In testing the consensus model, the University of Victoria Institute for Dispute Resolution has found that there are a number of assumptions that practitioners hold. Assumptions (in bold) are followed by the limitations of each idea in cross-cultural contexts.

- **The optimal way to address conflict is to get the parties in the same room and facilitate an open, forthright discussion of the issues**. This may not be true where parties find this style inappropriate or prefer indirect, discreet, or face-preserving methods of resolving conflict.

- **Parties in conflict emphasize their individual interests over collective values of family, community or society**. In fact, the opposite is true among members of many cultural groups.

- **A third-party intervenor must be a neutral person with no connections to any of the parties**. In fact, many parties prefer ombuds, advocacy or other non-neutral styles of third-party intervention. In cases of severe power imbalance, neutrality may provide a further disadvantage for the underpowered person or group. Some groups prefer a third party who is known and trusted by all the parties and who supports and articulates particular community values. [Lund, Morris and LeBaron 1994: 32]

Procedural matters that may need to be addressed in decision-making processes relate to time, language, translation and ground rules. Ross states that time frames may need to be extended "with opportunity for pauses to enable Aboriginal spokes people to consult their constituents, and to allow for reflection if the prospects for consensus may improve over time" (Ross 1995: 38). McCreary found that negotiating which language would be used, needed to be addressed in protocol meetings (1995: 54). Ross considers this issue and that of communication style directly in her principles for intercultural negotiation and conflict resolution: "design the process for the comfort and communication styles of the Aboriginal participants" (Ross 1995: 38). She recommends creating time for personal familiarization, allowing discussion settings and styles to be guided by Aboriginal people, employing intercultural mediators and understanding aboriginal communication styles (1995: 38).

Even sincere attempts to understand the cultural difference between the disputing groups are not enough to resolve the problem or dispute at hand because redistribution of

power does not follow cross-cultural understanding. Officials of regulatory bodies, industry executives, lawyers and intervenors may attend aboriginal ceremonies and even hold meetings in community settings. Such gestures contribute a great deal to understanding, but they do little to empower aboriginal groups.

Forums must be carefully crafted if the process and outcome are to be considered legitimate by all participants. Currently, many disputes are characterized by the wrong participants addressing the wrong issues in the wrong forums. Administrative or procedural matters are challenged not because that is the basic concern but because they are issues that can be raised in existing forums. Scientific questions are debated not because a party is concerned with the answer, but because they provide a means of gaining the attention of the other side or a broader public.

The most basic question is not whether joint problem-solving, with its emphasis on negotiation and mediation, increases the likelihood of achieving constructive outcomes. It generally does, and joint-problem solving can be appropriate beyond many conflicts where people generally think it is useful. Rather, the key issue concerns the limits to joint problem-solving in situations with large, power inequalities between the parties or when a conflict over important material interests also concerns a group's central values and identity (Ross 1995: 74).

Cross-cultural models: Culture and power

Rothman suggests that when culture and identity are central in a conflict, these concerns must be addressed first before any kind of technical or interest-based solutions will be possible (1995: 19). Culture is central in such disputes over water in the Middle East, where groups attach "profound cultural and spiritual significance to water (e.g., water as healer, cleanser, unifier). This creates deep-rooted, visceral feelings about water which do not engender strictly 'rational' responses to engineered solutions (Rothman 1995: 19). Rothman suggests that efforts to negotiate solutions to water disputes must carefully balance the technical and human dimensions at stake.

Rothman proposes a method for balancing dimensions, such as identity or culture that may be associated with the conflict (1995: 20). This method involves moving a dispute from

an adversarial frame to a reflexive frame in a pre-negotiation phase. Questions shift from: who wants what? to, why who wants what? This shift from 'what' to 'why' emphasizes finding common cultural concerns and relating them, where appropriate, to technical issues within the larger political conflict. Parties can then negotiate cooperative solutions which have a greater durability.

Ross's principles for negotiating resources in cross-cultural contexts adds an element to this model. She states that "principled intercultural negotiation would require that non-negotiables be respected, and Aboriginal people not be pressured to deny or abrogate their values and custodial responsibilities" (1995: 36). Susskind and Cruikshank (1987) warn that conflicts which involve core values and identity concerns or human rights (for at least one of the parties), are far less likely to be negotiable than conflicts over distribution of resources. In disputes involving core values, the clash of worldviews can be so fundamental that the only settlement is sometimes one in which one side imposes its will on the other or withdraws (Ross 1995: 74).

Alternative dispute processes can be used too frequently, without consideration of the source of conflict. According to Merry, the current movement towards consensual decision-making focuses on the forum and process for disputes. Practitioners tend to fit the problem to the process, based on analysis of structures and procedures (i.e., presence or absence of a third party, locus of decision-making power) (Merry 1987: 2062). This preoccupation leads to the assumption that fundamental problems between disputing parties are a function of misunderstanding, not of power differentials, conflicts of interest or fundamental value differences (Merry 1987: 2064). Where there is structural inequality, power imbalances or a value-based conflict, the consensus model may not be appropriate. Rights based disputes may still be better placed in courts (Susskind and Cruikshank 1987). However, there are many instances where the rights of aboriginals have not been protected in Canadian courts either. For example, the *Delgamuukw* (1991) judgement addresses the issue of whether the Gitksan and Wet'suwet'en have existing aboriginal rights that are recognized in Canadian law and "whether, in particular, these rights include 'ownership and jurisdiction' with respect to their own people and their own territories. The judgement decides that, broadly speaking, the answer is 'no'" (Asch 1992: 221). Asch demonstrates that there are serious concerns that the

judgment's findings of fact are not accurate, in part because the information relied upon is ethnocentric:

> ... It would not be accurate to assume that even pre-contact existence in the territory was in the least idylllic. The plaintiffs' ancestors had no written language, no horses or wheeled vehicles, slavery and starvation were not uncommon, wars with neighbouring people were common, and there is no doubt, to quote Hobbs (sic), that aboriginal life in the territory was, at best, "nasty, brutish and short." [*Delgamuukw et. al. v. The Queen et. al.* 1991 as quoted in Asch 1992: 227]

Directing disputes to different forums involves political decisions about how to define problems, what kinds of coercive force to impose on parties and what value society should place on problems. "Dispute resolution ignores the political nature of the fitting process, the possible use of unrecognized criteria for judging such as ethnicity, gender, class ... (Merry 1987: 2065).

This concern with political aspects of conflict resolution and power is shared by Nader. Nader criticizes the alternative dispute resolution movement for its inattention to power, its hegemonic character, and lack of self reflection. She shows that when a dispute is moved to a consensual process, away from a third-party decision-maker, the more powerful disputant (often a corporation) can use alternative dispute negotiation to greater advantage (Nader 1995: 50). Nader is not optimistic that more consensual processes will result in fair solutions, for "the literature on dispute resolution gives us little reason to believe that the stronger nation is going to exert the patience or consideration to 'learn' or 'share' without the force of law, the threat of litigation, or the presence of a mutually recognized authority" (Nader 1995: 53). She states that modern negotiators tend to write like true believers, "avoiding controversy even at the cost of self-reflection, which would necessarily involve understanding the historical and socio-cultural context in which ... negotiation serves as hegemonic power" (Nader 1995: 61).

This issue of power has been recognized and suggestions for redressing imbalances have been made. For example, McCreary, working in Ecuador on oil and gas development, found that "acute power imbalances often exist between indigenous communities and corporations with respect to access to capital, political power and information. Our experience shows that the information gathering phase of an independent review can help to redress these imbalances in two respects" (McCreary 1995: 51). Involvement in information gathering

provides a balance with respect to formal training and experience and can ensure that additional information is included (traditional knowledge). In the case of the indigenous community, the Awas Tingni in Nicaragua, Anaya and Macdonald (1995) outline similar power imbalances between the community and the government. The government was more responsive to industry and seemed to favour the status quo. The Awas Tingi, attempting to attain formal recognition of its broad territorial rights, addressed the power imbalance through employing their own legal and technical support team which could then exert greater pressure on the government (1995: 73).

LeBaron indicates that consensus approaches may privatize what fundamentally needs to be public. If used too frequently or for inappropriate issues, consensus approaches may function to suppress criticism. If achievement of harmony and positive outcomes are emphasized, they may hide fundamental differences. "Indeed with its 'apple pie' nature (who can be against consensus and harmony?) it may actually placate those who need to be heard" (LeBaron 1992: 13). Many of these issues lie outside of the realm that a regulatory body can address. Nonetheless, as Ross's (1995) and Rothman's (1995) changes to traditional models indicate, there are ways to improve models so that they can effectively resolve disputes across cultures.

Including best available knowledge for risk management

Land claims, growing power of aboriginal communities and political pressures in Canada are such that without collaboration of local communities, future development and resource use may be hindered (CARC 1995; Stevenson 1996). One of the principles for risk management outlined by Brunk, Haworth and Lee (1991) is the use of the best available scientific data. However, risk management that relies only on scientific knowledge will be incomplete. An effective process would pool existing and available cultural knowledge to make the best decisions (Stevenson 1996).

A Canadian example of this comes from Tuktoyaktuk. Under the auspices of the Arctic Environmental Strategy Contaminants Program, the Inuit Tapirisat of Canada conducted a study on local perceptions of contaminants in country food in several Inuit communities, including Tuktoyaktuk (Usher et al. 1995). Many of the recent changes

perceived in the quality, abundance and distribution of fish, caribou, ptarmigan, berries, etc. were attributed by numerous community residents to be the direct result of pollution by the petroleum industry. However, most Elders, whose knowledge and experiences had the greatest time-depth, felt that these environmental changes were just part of the natural order of things (Usher et al. 1995). Thus, one of the greatest contributions that Native people can bring to bear on environmental monitoring is their ability to distinguish natural cyclic variation from industry-generated environmental change (Stevenson 1996).

What is traditional knowledge (TK)?

The Working Group on Traditional Knowledge in the Northwest Territories defines TK as "knowledge that clearly derives from, or is rooted in the traditional way of life of indigenous peoples. It represents the accumulated knowledge and understanding of the human place in the universe, understandings which are reflected in the language, social organization, values, institutions and laws of that particular culture" (Legat 1991: 1). Also termed indigenous knowledge, it is "the culmination of generations of experience and insight passed down through oral tradition. This knowledge is holistic in nature, incorporating spiritual, ecological, human and social experiences into an understanding of Native people's place in the universe" (Hoare, Robinson and Levy 1993: 48). Freeman writes that "both native systems and western science rest on the same foundation - namely empirical evidence. Both systems place value on the systematic accumulation of detailed observations and the abstractions of norms from disparate sets. At this point, however, the two systems diverge. The Native system assesses deviations from the norm in a qualitative sense" (1985: 265).

While traditional knowledge is a body of knowledge that informs and influences all aspects of aboriginal life, a component of it is ecological knowledge. Traditional ecological knowledge is:

- based on first hand observation;
- a system of classification;
- empirical observations about the local environment;
- a system of self-management that governs resource use;
- a body of knowledge that varies from person to person, according to age, gender, social status, and profession, and
- cumulative and dynamic.

A key aspect of traditional knowledge is that traditional knowledge cannot be taken out of context. Because it is culture-specific and often person specific, removing it from a cultural or individual context would cause the knowledge to lose its meaning. As transmission of traditional knowledge is oral it can be difficult and perhaps inappropriate to document and systematize it. But, because traditional knowledge is perceived as threatened (due to cultural transmission channels breaking down and the death of elders), attention is being paid to documenting it by the Dene Cultural Institute and the Arctic Institute. As a result of this formalization, some communities have made this information available for use in decision-making, providing control of the information is maintained by the community. Information can be communicated through the use of traditional land use and occupancy maps of the area, hunting and trapping trails, effects of industry on wildlife or other issues.

In order to be effective, each group must be able to translate their knowledge and make it accessible for others. Brian Wynne states that "scientific communication is normally ignorant of its own tacit 'body languages' of institutional interests, which nevertheless constitute an essential part of people's interpretations of and response to that knowledge" (Wynne 1992: 119). For effective decision-making and risk management, science and traditional knowledge should both be made accessible and understandable.

There is scepticism about the utility and relevance of traditional knowledge to modern environmental management and conservation. Roberts explains that this is understandable "in view of the fact that in some countries, formal training in cultural ecology or ethnoecology is not required for graduates in science. Hence knowledge of cross-cultural perspectives, ethnographical methodology, or of the use of oral narrative and metaphor to convey ecological information including conservation or 'environmental ethics', is limited or entirely lacking" (Roberts 1995: 2). This issue points to a need for an increased level of cultural awareness.

Incorporating traditional knowledge: Current initiatives

The future of incorporation of traditional knowledge in decision-making is uncertain. Traditional knowledge is achieving global recognition as a resource that must be established, preserved and recognized. The United Nations "Earth Summit" or UNCED '92, held in Rio de Janeiro in June 1992, expanded the range of values recognized as part of sustainable forest

management. *Agenda 21* recognizes and encourages the role of indigenous people and their communities in resource development. Principles from the document are:

- Recognition that the lands of indigenous people and their communities should be protected from activities that are environmentally unsound or that the indigenous people concerned consider to be socially and culturally inappropriate.

- Recognition of their [indigenous peoples] values, traditional knowledge, and resource management practices with a view to promoting environmentally sound and sustainable development.

- Recognition that traditional direct dependence on renewable resources and ecosystems, including sustainable harvesting, continues to be essential to the cultural, economic and physical well-being of indigenous people and their communities. [United Nations 1992: Section 26.3]

These principles have been integrated into forest management agreements in British Columbia. In March of 1995, the Clayoquot Scientific Panel was convened to create recommendations for sustainable forest practices in Clayoquot Sound. Despite a long history of residence and resource use in the area of Clayoquot Sound, current forest practices standards show little or no recognition of First Nations' values or interests. Where First Nations' knowledge or interests are recognized (e.g., cultural sites), provisions for them are often cursory. Current standards reflect limited understanding of the nature and the scope of First Nations' traditional knowledge and interests, and what is required to incorporate or protect them. This document has addressed these issues and made the following recommendations.

- Incorporating Nu-Chah-Nulth traditional ecological knowledge into environmental planning, inventory, monitoring, and research to complement scientific knowledge;

- Co-management based on equal partnership and mutual respect as a means of including indigenous people and their knowledge in planning and managing their traditional territories;

- Full consultation and active participation of the Nu-Chah-Nulth in planning and decision-making processes, in all operational forestry activities (including inventory and mapping), and in monitoring and evaluation related to ecosystem management;

- Recognizing *hahaululhi* (TK) in determining and implementing ecosystem management within traditional territories;

- Broadening the definition of culturally important areas beyond the 'cultural heritage sites', based on areas deemed to be culturally important by the Nu-Chah-Nulth First Nations, and including sacred, historic, and current use areas;

- Providing education and training to Nu-Chah-Nulth people in ecosystem management;

- Actively recruiting First Nations workers for forestry and related activities; and developing a forest worker qualification program that includes education and training related to Nu-Chah-Nulth perspectives and values. [Scientific Panel for Sustainable Forest Practices in Clayoquot Sound 1995: viii]

These principles represent current attempts to make agreements that touch on employment, reclamation, inclusion of aboriginals in decision-making and environmental assessments. The integration and feasibility of these initiatives are not yet determined. Another approach, the Whitehorse Mining Initiative, may prove to be a promising direction.

After a major diamond find was discovered in the Northwest Territories, the Federal Environmental Assessment Organization (FEARO) decreed that traditional knowledge must be accorded equal weight with scientific knowledge in the environmental assessment of development. In the public review process, aboriginal people (Dene) had many challenges to face, such as translation of their concepts into formats understandable to scientists. Often concepts lose their meaning through translation; this is associated with worldview and language differences (Usher et al. 1995). The Dene also have unequal access to means for gathering and presenting their knowledge. Although the proponent (Broken Hills Proprietary) provided money for studies, the amount of time required to gather knowledge in a careful and precise way was inadequate.

When a regulatory body weighs science against traditional knowledge, they may encounter difficulties in evaluating and verifying expertise. An associated issue is distinguishing between qualifications of aboriginal and scientific experts. Finally, those on the hearing panel may encounter difficulties in assigning evidentiary weight.

For industry, the incorporation of traditional knowledge is an additional requirement which they often have little control over. The studies may take more time than industry feels they can afford. In the end, many corporations are also finding that they cannot always acquire the traditional knowledge studies. For example, the Athabasca Native Development Corporation (ANDC), funded by Alberta-Pacific, collected traditional knowledge about an

area, and then did not release the results to the corporation until relations were established between the corporation and the Chief. The ANDC did this to ensure that corporations do not just carry out studies and then use them out of context and without permission of the band.

The foregoing concerns relate to intellectual property rights (IPR), another initiative in the preservation of traditional knowledge. IPR seeks to create a legal framework for preservation and continuance of traditional knowledge. "Control and conscious ownership by indigenous peoples of their traditional knowledge might serve to enhance their solidarity and pride ... intellectual traditions of indigenous societies (should be) valued monetarily for what they are worth" (Stephenson 1994: 181). The benefits of this approach include the provisions that aboriginal people own their knowledge, and maintain the power to divest it and gain monetarily from it. Limitations are that categories between cultural, intellectual and physical property for indigenous peoples are not distinct and mutually exclusive. Further, there is still no established precedent to litigate for intellectual property rights (Posey 1994: 236).

Establishing partnerships

One model increasingly used to manage development based on the knowledge available to aboriginals and scientists in Canada is co-management. As a result of land claims settlements, joint aboriginal-government wildlife and environment boards have been established, with equal representation from each party (Usher et al. 1995). These co-management boards exercise effective control of wildlife and environmental research and provide for aboriginal participation in research. Because local residents are more likely to see themselves as having a stake in such research projects, they appear to have more confidence in the results (Usher et al. 1995). Existing co-management arrangements vary in their effectiveness. While they are not entirely decentralized, and don't engage all local residents equally, they appear to have strong local support. They may provide valuable partnership models in dealing with energy resource management.

The 1995 CARC review of mining in aboriginal homelands concludes that sustainable development "is possible only when partnerships are created to cooperate on designing and building the future. If mining is to contribute to sustainable futures in the North, one of the

most important challenges will be building effective partnerships that respect diverse cultural, social and economic traditions" (CARC 1995: 8).

CONCLUSIONS

A perspective, grounded in anthropological methods and theories, offers an alternative to simplistic formulae for cross-cultural risk communication and dispute resolution. This review has surveyed risk management, and focused specifically on two strategies for involving the public and resolving conflict over industrial development. Risk communication, one stage in a risk management process, is shown to be most effective when cultural and social factors are taken into account. As risk communication does not guarantee harmony and agreement, this review also focuses on dispute resolution. Cross-cultural models for dispute resolution are investigated and shown to pose peculiar challenges, not only because they are negotiations over a limited good, but also because different societies place different value on land and other vital resources.

CHAPTER IV: METHODS

Research was conducted from 14 September 1995 to 5 February 1996, throughout Alberta, using a variety of techniques drawn from several fields. Investigation of this case proved to be challenging as conflict generated by the gas plant siting and EUB hearing process was unresolved and tensions were high on all sides. For example, the research plan had to be altered when Unocal Canada declined to participate in this study. However, with most crises come opportunities: my conclusions have wider implications for Alberta risk management processes. This chapter reviews the methodological approaches and techniques employed for data collection.

Anthropologists prefer to generate theory inductively and to test theory locally in small-scale studies. Perhaps because there has always been a fluid interaction between theory development and field observations, the field has seen a close and interactive relationship between theoretical development and field practice. Anthropology has also tended to borrow from other disciplines, but what we lend back are qualitative research methods, cross-cultural perspectives, commitment to the 'emic' voice, and our strong tradition of action research, (i.e., empowerment) (Schensul 1996: 2).

Although this is not a traditional anthropological ethnography (in that it does not represent a single culture or many different aspects of one culture), the style and method of this work are consistent with that of ethnography. "An ethnography is a written representation of a culture or selected aspects of a culture" (Van Maanen 1988: 1). Ethnography joins together culture and fieldwork, the joining of which is experientially driven (Van Maanen 1988: 4). This work draws on my observation of a public hearing, and extensive interviews with three different sectors that met at this event: a regulatory body, industry, and aboriginal groups.

Munger points out the future path for study of disputes:

> any meaningful analysis of dispute processing must include the participants' view of particular disputes. At the very least, this perspective is necessary to understand why a participant in dispute processing invokes the process to begin with ...

> Meaning attributed to conflict, to particular norms, to third-party interests, or to nonlegal third-party dispute resolves are equally important. [Munger 1992: 440]

He suggests that case studies, histories, narratives and event focuses are the methodologies necessary for the field of dispute resolution to move further. LeBaron states that "training in ethnographic techniques may lead to better understanding of the role of culture in disputing and how the issues arising from it are best addressed" (LeBaron 1992: 58). It is clear that traditional anthropological methods, analysis and perspectives are central in the emerging interdisciplinary field of environmental risk management.

In this chapter I describe the main procedures used in conducting my research. These include: literature review, document reviews, focus group techniques, and interview.

BACKGROUND RESEARCH: LITERATURE REVIEW AND CONFERENCES

Early in this research I conducted a thorough review of the literature related to cross-cultural environmental risk management and dispute resolution. The review was continued throughout my research. I began with very broad areas of research: cultural anthropology, political anthropology, risk communication, work on traditional knowledge and applied anthropology. I focused in particular on those fields that directly relate to this topic: cultural anthropology, risk communication and the field of dispute resolution.

Resources were gathered in a number of ways: CD-Rom searches, annotated bibliographies, the Social Sciences Citation Index, theses, bibliographic essays, journals, and searches of the University of Alberta's and City of Edmonton's resources. A very important source was experts in the field. Many of these people sent me bibliographies, referred me to more knowledgeable writers, or sent their own work along to me.

Conferences were also an important way to get information. For example, the University of Calgary hosted a conference in February 1995, "Co-Management: Building Bridges". In December of 1995, I attended the annual conference of the Society for Risk Analysis, "Learning from Cross-Cultural Comparison". The theoretical perspectives of academics were tempered at these conferences with the practical insights of industry and

aboriginal groups. Informal discussion at these meetings provided realistic perspectives on the issues of this thesis. I took detailed notes during the presentations and informal conversations, and have included these observations in my data.

DOCUMENT REVIEWS

Collection and analysis of documents established the historical framework for the interviews and focus group. The document reviews began with the transcripts from the Unocal Gas Plant hearings (approximately 2000 pages long), legal information, minutes from meetings between Unocal and the Lubicon and correspondence that is available to the public. These are a fundamental base for this thesis, and I treat them with equal weight to the interviews. As the interviews began, I was constantly passed information. I have maintained a collection of articles relating to this thesis topic that appeared in local and international newspapers over the past year and a half. I sifted through this information and coded it according to theme; the themes were developed while I read the transcripts for the hearings, then refined constantly throughout the entire phase of data analysis. They are:

- Process (problems, strengths, alternatives)
- Communication (miscommunication, alternatives, cross-cultural communication).
- Culture (corporate perspectives, regulatory perspectives)
- Fear and trust
- The regulatory board (purpose, jurisdiction, other cases, public interest)
- The sour gas plant (environmental effects, social effects, size)

DATA COLLECTION TECHNIQUES

Focus Groups

The use of focus groups as a research technique emerged from the field of marketing and media in the 1970s. Krueger defines the distinctive characteristics of focus groups as following:

- focus groups involve homogenous people in a social interaction;

- the purpose of focus groups is to collect qualitative data from a focused discussion; and,
- focus groups are a qualitative approach to gathering information that is both inductive and naturalistic. [1988: 47]

Since then the technique has been adopted by a variety of other disciplines. I used a focus group to elicit information from members of the EUB. Application of the focus group method to review a regulatory board's policy is not new. In mid-November of 1994, for example, the EUB organized focus groups to review the safety measures applied in developing Alberta's sour gas facilities. The focus groups included members from the EUB, the oil and gas industry, the local government, and the public at large. The report of this focus group (ERCB 1994e) was a useful guide for designing the focus groups in my study. Generally, focus groups about a defined issue are used with people who do not know each other. In this case, I chose to apply the method to a relatively homogeneous group (Krueger 1988).

The focus group method has a number of advantages: it is quick, there is safety in numbers, and there is a certain degree of flexibility (Stewart and Shamdasani 1990). It also facilitates cross-comparisons for data analysis (Kitzinger 1994). Agar and MacDonald (1995) state that a focus group is a process that is somewhere between a conversation and a meeting. In this research, the focus group, with its resemblance to a meeting, was a familiar setting for the Board (tape-recorded, facilitator, speaking in turn on one theme). There are also a number of disadvantages to the focus group method in that it can be costly, time consuming to transcribe, and encourage conformity within the group (Kitzinger 1994; Krueger 1988; Yuhas Byers 1991). These did not prove to be issues in my research.

Access to the Board was accomplished through an introduction from Dr. Steve Hrudey, Eco-Research Chair in Environmental Risk Management and one of my committee advisors. Soon after the initial contact was made, the Board set up a meeting at a convenient time for everyone in a boardroom at the EUB offices in Calgary. The Chairman invited all the members who were present at the hearings in 1994, and all of these individuals participated in the focus group.

My experience with industry was quite different. I had intended to conduct a focus group with Unocal and contacted them directly in September of 1995. I sent an initial letter to an individual to whom I was referred by a secretary over the phone. Unfortunately, this initial contact was considered inappropriate by Fritz Perschon, President and General Manager, and he stated that this was one of the reasons why Unocal would not take part in the research. Subsequently, the Friends of the Lubicon declared a boycott of Unocal on 14 September 1995. Despite additional correspondence and discussion, Unocal declined to participate in this research.

After Unocal's refusals, I adjusted my strategy. In consultation with my supervisor, and with advice from both Dr. Hrudey and an EUB staff member, I chose several individuals from different corporations that have participated in public hearings in the past where aboriginal groups were involved. Again, Dr. Hrudey provided introductions, and within two weeks, I had secured the participation of three corporations and one individual who in the past worked for Nova. I adjusted my research strategy to key-informant interviews.

The focus group

The focus group was held in September in an EUB board room, home ground for the participants. The questions asked at the focus groups were:

- What is your assessment of the hearing process thus far, with regard to this particular case?
- What were some of the specific problems with communications before, during and after the hearings process?
- What are the strengths of the present process with reference to communication?
- How do you think the different perspectives of the various participants have influenced the process?
- What changes can you suggest?
- Are there any other comments or things that we may have missed in today's discussion?

I chose not to conduct the focus groups myself for a number of reasons. First, most literature advises against this, and this was confirmed by Dr. Carl Urion, who has used focus groups as an anthropological technique on a number of occasions. Second, I believed that my age (25) might preclude answers to many questions. Third, I would not

have been able to observe and take notes if I had also been in charge of facilitating the focus group. For these reasons, I hired a facilitator, Dr. Nancy Gibson, who was briefed about my research. Dr. Gibson asked questions that I would never have asked myself because of my familiarity with my topic.

After the focus groups, I had a number of comments that I wanted to follow up with a few of the EUB staff. I put the questions together and mailed them off. I left it up to the respondents as to how they would like to discuss the questions (e-mail, phone, letter, visit). Following this, I conducted one telephone conference call with two EUB staff.

When I left the focus group, I had two and a half hours of tape recorded interview, many pages of notes (recording speaker, interruptions, and observations), and the ensuing observations and analysis of the facilitator and myself, which I wrote up immediately following the session. This group showed remarkable agreement in their responses to the questions.

Interviews

The basic methodological technique in anthropology is the one-on-one interview. I planned originally on interviewing only the Lubicon. As I encountered challenges in following the original design of conducting a focus group with Unocal, so too did I face challenges here: I interviewed one person from Amoco, Suncor and Syncrude. I also interviewed Bob Blair, former C.E.O. of Nova Corporation. Another individual, who was involved in the Alberta-Pacific public hearings as a representative for an aboriginal group, became a key source. Because of his experience of the Alberta-Pacific hearings combined with his expertise in the area, he made critical contributions to this work. I interviewed two supporters of the Lubicon. Another two interviews were conducted because these two sources are specialists on issues such as altering legal processes.[6]

---

[6] See Appendix 3 for a complete list of the interviews, and the numbers used to code them.

Interviews conducted

The sources were chosen for either of two factors: their knowledge of the topic or their participation in public hearings where aboriginals and industry were both present as applicant or intervenor.

All of the interviews were semi-structured, open ended and one-on-one. The interviewee often led the discussion. I taped each interview and transcribed it myself. With industry representatives, the interviews were a mix of unstructured and structured discussions. I had a clear plan, led the questions, and in some cases gave the questions to the interviewee ahead of time. Interviews with the Lubicon were less structured, although roughly of the same length. The discussion was led jointly by the interviewee and I.

There is criticism that one-on-one interviews are unrepresentative (Devereux and Hoddinott 1993). One interview with an individual does not give representative data on a group. This is both a strength and a weakness of qualitative research. Representation of a group, which I do not claim for this data, is only one objection of many. I was more concerned with eliciting the context and range of viewpoints on the central questions of my research. This problem is averted somewhat because when interviewed, each individual was aware that they were representing a group (either the corporation, the community, the regulatory body).

The data from interviews were comparable, in that the questions and ideas were focused and consistent. In each case, the individual knew I was there to learn about energy resource use and land management and cross-cultural communication. The conversations that I had were consistent, addressing similar themes and ideas.

Interview setting

The interviews were conducted wherever the interviewee wished. The corporate interviews took place at the Hotel McDonald, office towers in Calgary and over the telephone. Follow-up interviews with the EUB were conducted through telephone conference calls. Other individuals (anthropologist and lawyer) were interviewed in their offices at the University of Alberta.

Interviews with aboriginal representatives were conducted in their homes. The interview with the source who was involved in the Alberta-Pacific hearings was conducted in his home up north. To reach the Lubicon, I contacted Terry Kelly in Edmonton, who takes care of organizational details for the Lubicon. In November, when I drove the seven hours to Little Buffalo, I was told to come for awhile. I stayed with Elaine Bishop (Voluntary Service Worker), a woman who is in constant and close contact with the Lubicon Chief Bernard Ominayak and his advisors. She took me on a tour of the community and drove me to the sour gas plant, and is a key interviewee for this study. Through her and the numerous adults and children that dropped by her home, I gained a sense of the challenges that the community faces. After years of seeking self determination, the Lubicon see the area in which they live crossed by roads, pipelines and pumpjacks. Despite the fact that substantial resources are extracted from the area, the Lubicon have no electricity, plumbing or running water in their houses. On the last day of the five days that I was there, I was permitted to conduct an interview with a gentleman from the Band.

ETHICAL CONSIDERATIONS

This research was passed by the anthropology ethics committee and I have abided by standard regulations and protocols.[7] However, a specific challenge emerged. A number of sources wanted to be named. This development is in keeping with Wilson's observations:

> Researchers need to think long and hard about when and how to maintain confidentiality and anonymity. Confidentiality--not revealing facts elicited through field research--seems necessary only in particular situations. In my research, I make no general promises of confidentiality to my informants--on the contrary, I emphasise that I want people to tell me things precisely so that they can be made known. However, I generally avoid providing unnecessary details if there is any reason to suppose this could be used against the informant or population. [Wilson 1993: 186]

---

[7] See Appendix 4, a copy of the ethics approval and the informed consent forms used in the research.

In the beginning of my interviews, I assured the individual of confidentiality and anonymity. Many sources made it clear that they were not concerned with this issue. Individuals who were not concerned with confidentiality are Bob Blair, former Chief Executive Officer of Nova Corporation, Dr. Michael Asch, an anthropology professor at the University of Alberta, Larry Reynolds, an associate in the Eco-Research Program, Vince Rodych, Manager, Communications and External Affairs, Amoco, Bruce Friesen, Manager of Environment, Syncrude and Elaine Bishop, Voluntary Service Worker, Little Buffalo. These individuals will be cited directly in my reporting of the data. Interviews are coded according to the codes in Appendix 1.

Most interviewees indicated an interest in receiving a copy of the results of this research. I have made it clear that access to the interview data itself is restricted, but that the overall study results will be made available to the government, industry and the Lubicon.

CODING AND ANALYSIS

I transcribed verbatim each interview and analyzed it according to its content. My content analysis techniques (Patton 1990) included organizing and re-reading all the original data, selecting key words and concepts and listing them with brief notes. The words were then screened and classed under more specific headings which relate to the research questions. From the list of main topics I could then identify themes and categories based on the inductive approach of content analysis (Patton 1990: 390). I used the coding terms that emerged out of the transcripts for the gas plant hearings, relating to communication, trust, fear, relationship and cultural difference.

These terms and themes transferred fairly well to the interviews. Some modifications were required because participants had experiences and thoughts to offer outside of the realm of the issues raised in the hearings. For example, Suncor has not been in a public hearing, although they are planning for one in 1996. Such elements of surprise in research activities (Van Maanen 1988) and of discovery of new patterns provides the excitement in the analytic process for the researcher. This flexibility is an advantage of

qualitative research methods. As a result, I broadened my terms to include such things as alternatives, proactive corporate communication strategies, etc. Next, I placed the data in charts, such that all perspectives on the strengths, weaknesses and alternatives for change were in one place. From these charts, the patterns emerged. I was able to get a sense of the comparisons, contrasts and similarities in participant's comments.

These methods, transcript and document reviews, focus group, and interview all form the basis of the data for this research. Themes that emerged from the data are reviewed in the next chapters.

CHAPTER V: THE DATA

SECTION 1: OVERVIEW OF THE CASE

In this chapter, I will review the positions of the EUB, the Lubicon Cree Nation and Unocal during the dispute over the expansion of the sour gas plant. The intent of this research is not to decide whether Unocal misled the Lubicon about the sour gas plant, nor to decide whether there is, as some interviewees suggest, a conspiracy between the government and the oil and gas companies in Alberta to isolate the Lubicon, or whether the Lubicon used the process as a means to a wider end. In other words, I am not interested in diagnosing or assigning blame.

In this section, I will outline the extent of disagreement about the plant, the attempts made to reconcile the groups, and the interests and positions of the different groups. One level of this dispute relates to the issue of Unocal misrepresenting the nature of the plant to the Lubicon. On another level, this conflict was about the impacts of the plant and about the communication exchanges between Unocal and the Lubicon. However, data is presented in this section which indicates that the Lubicon evaluate this plant on a longer time scale, in relation to all industrial activity in the area (road building, oil and gas exploration) and for the lack of economic return to the community from industry. The Board's final decision recognized these differences, but weighed impacts against their responsibility to regulate the energy industry in the overall provincial public interest. The Board concludes that the band may gain economically if co-existence could be mediated.

Jurisdiction

The Board's jurisdiction to decide on this issue was contested by the Lubicon, on the basis that they never ceded the land to the federal government. The Lubicon lawyer (Raymond Schacter) introduced the Lubicon in the following way:

> It is now well-established as an anthropological fact that Cree Indians inhabited the area north of Lesser Slave Lake between the Peace River and the Athabasca River long prior to European penetration of that area ... According to Cree oral tradition transmitted to the elders and leaders of the Lubicons through their ancestors, the Lubicon Society of Cree people have always inhabited, hunted, fished in and used the Claim area. The present day Lubicons and their ancestors had common traditions,

> rules of conduct, a system of leadership, a culture and their own language. [ERCB 1994a: 101).

Unocal argued at the hearings that:

> the Lubicon's land rights claim issue is one of an unfulfilled treaty entitlement claim, rather than an aboriginal claim. It argued that there could only be an aboriginal claim if the Lubicons were correct in their assertion that their members were indeed a separate and distinct Band and had no connection to the signatories of Treaty 8. A treaty entitlement claim on the other hand would meant that the Lubicons do not own the land but that they were entitled to a reserve somewhere, and that they would have hunting and fishing rights on unoccupied Crown lands. [ERCB 1995b: 13]

To this issue, the Board states:

> The Board believes it has full statutory authority to regulate energy related activities on this disputed land, and holds the view that the mineral and land surface leases were properly obtained by Unocal from the Crown. [EUB 1995a: 2]

From this introduction, it is clear that there is a fundamental clash in jurisdiction and approaches to this hearing. The contributions of intervenors further complicated the hearings, as they did not always present evidence that the Board is accustomed to, for many of them were there to support the Lubicon, and not to speak to technical or environmental issues. This case was unusual, in that it was a re-review of an application, and the Board was flexible in adapting to it.

The sour gas plant

The Unocal plant, though not within the boundaries of the Grimshaw Accord negotiated in 1988, is well within the traditional territory of the Lubicon Cree. Board officials state that the plant is "a very very small sour gas plant in terms of being sour" (1). The Board staff perspective has to be considered within the range of sour gas concentrations that they deal within the province. Sour gas plants elsewhere in Alberta have much higher sour gas concentrations and sulphur emissions. From the Board perspective, this knowledge and familiarity with more active plants may lessen the perceived impact of this plant. However, to the Lubicon the gas plant is a "gas chamber, because everything goes right onto the plants ... I'm not sure the rest of the people would want to live beside this plant" (4). Unocal, on the other hand, represented the plant as a "small, standard gas processing plant .... this plant is not edge of the envelope and is not testing the limits of science" (ERCB 1994a: 1869). Further,

they assert "there is no evidence that such plants cause health or environmental problems in Alberta" (ERCB 1994a: 945). At the public hearings, a Unocal representative tried to put the plant into perspective:

> There is not an environmental impact statement done here because it's much too small a plant to even require an environmental impact assessment under law in this province. So it's fair enough to generate concerns, as Mr. Perschon said, but it's also important that you stop extrapolating those concerns when there isn't a concern founded. [ERCB 1994a: 793]

This broad disagreement concerning the impact of the plant was represented at the hearings. These are the formal and publicly represented disagreements that are presented in front of the Board.

The Lubicon concerns in the hearings included:

- public safety;
- public health;
- adverse environmental impacts;
- adverse effects on wildlife;
- adverse social consequences, and
- adverse effects on the traditional way of life of the Lubicon. [Intervention of Lubicon Lake Indian Nation 1994: 2]

When the hearings began, the Lubicon were willing to compromise and allow the plant to be located 20 kilometres south of the current position. At this distance, they felt that their traditional territory and health would not be impacted.

Miscommunication

One major source of conflict was the communication record between Unocal and the Lubicon. The hearing focused in part on the numerous communication exchanges between Unocal and the Lubicons that had taken place before the first gas plant approval was issued on 10 February 1994. The primary issue was whether the Lubicons were fully aware of the technical, environmental, and other impacts of the Unocal project at the time that they responded to the first proposal. In their final decision, the Board accepted that,

- cultural differences between the two parties led to less than adequate communication of the project and its impact.

- As a consequence, the Board does not believe that the Lubicons gave informed consent to this project. The Board does not accept, however, that the Lubicons have the right to prevent the plant from being developed for this reason alone. [ERCB 1995b: 18]

During the hearing many of the reasons for this communication gap emerged. Application procedures for expansion of a plant in traditional territory of the Lubicon Cree requires the applicant to contact the Lubicon to obtain their approval. When Unocal did this, they referred to expansion of the plant, but not directly to conversion to sour gas. As a result, the Lubicon agreed to the plant expansion, on the understanding that it would continue only to process sweet gas. Unocal published the application for construction of the sour gas plant in the *Peace River Gazette*; few of the Lubicon receive or read this paper.[8]

Chief Ominayak stated:

> a lot of our, especially the older people still don't read and write. Even if you have an ad in the newspaper ... it wouldn't make a whole lot of difference to a certain percentage of our people. But for myself, if I had seen it, I very seldom get any kind of paper, never mind you the Peace River paper. [ERCB 1994a: 1178]

Public notices in the newspaper were written in technical language, which is generally not well understood by the layperson. Unocal never sent complete documentation of the plant application to the Lubicon because "we were uncomfortable with burdening them with paper. We attempted to recognize that they wouldn't be comfortable with that kind of documentation" (ERCB 1994a: 245).

Relationship between Unocal and the Lubicon

The EUB attributes miscommunication to insufficient recognition of cultural difference. However, the relationship between Unocal and the Lubicon was tenuous even before the sour gas plant dispute began. At the focus group, one of the Board members stated:

> I would fault the company for having kind of an ad hoc process, if you can call it that, to dealing with the Lubicons. They had had a confrontation in '86 and went to the courts. As a result of that I think they chose not to engage in ongoing dialogue, or a good neighbour relationship with the Lubicon until they had an application. They did the minimum amount they thought they needed to do in order to stay in touch and so there was no confidence building going on between 85 and 94 ... The Lubicons truly mistrusted Unocal, and they still do. [1]

Contact between Unocal and the Lubicon is now limited.

---

[8] For a copy of the hearings notice, see Appendix 5.

Since the decision was rendered in February of 1995, external parties have tried to mediate the situation. In September, 1995, the Sister's of St. Francis established a joint meeting between the parties. However, this does not seem to have altered the relationship between Unocal and the Lubicon. The Sister's of St. Francis used their 7,000 shares in the company to pressure for change. Perschon commented at the meeting that "the plant can't be moved. If the relationship (between Unocal and the Lubicon) is so bad it can't be fixed, it doesn't matter. Moving the plant will not change the politics" (Lennarson 1995: 19). The Lubicon position was similarly hardened towards Unocal. Ominayak comments, "frankly, with neighbours like Unocal, who needs enemies" (ERCB 1994a: 1537). A Lubicon source indicated that they have much better relationships with other corporations in the area (4).

The Lubicon claim that they were intentionally lied to by Unocal. "We were lied to here, right off the bat. Unocal sends their representatives to talk to us, and I was there. And they told us, it was just an expansion of the original plant. And that was an old facility, not a sour gas plant. They never mentioned anything about a sour gas plant" (4). On the other side, Perschon claimed that "nobody forced Chief Ominayak to sign any of those letters of approval .... We did not hold a gun to his head. And that has been suggested over and over again that somehow that we hurried up the consultation process .... Mr. Goldie tried to indicate that we were prepared to negotiate, talk, consult, educate. We would not have started that construction if the Chief had given any indication at all that he had concerns with this project (ERCB 1994a: 789).

In the end, the Board accepted that the Lubicon had not signed with full knowledge of the plant. The public hearing was called to review the situation.

Discussion of the hearings

The hearings were held in two separate buildings over November and December of 1994 in Edmonton, Alberta. The focus group held with the EUB reviewed the Unocal gas plant case. The Board characterized the public hearings as fair, but adversarial. The EUB's dedication to fairness in their process came through quite strongly. While they recognized that the Lubicon may not see the outcome as fair, they emphasized that "being fair and agreeing with the results don't have to be the same. Like, I mean, a lot of people perceive fairness if the

result is what their position is" (1). The public hearing was characterized as fair, because it "allowed for ... disclosure of information from all parties ... and in that regard it was very much a success" (1).

Although miscommunication was an issue throughout the hearings, the Board commented that the hearing process was successful in this case, not only in achieving a decision, but also in bringing out the different sides. "It speaks well for the hearing process in the sense that at the hearing both sides did come out and present their views and in that sense communication took place and the process allowed that to take place, where efforts before for that had failed" (1).

The EUB made attempts to resolve the conflict before the public hearings. They held one meeting, which was characterized by Lennarson, a Lubicon advisor, as a meeting at which the Board facilitators, "working in tandem with your colleagues from Unocal, aggressively tried to talk the Lubicons out of requesting such a hearing" (Lennarson 1994). An EUB member characterized the attempts to resolve the conflict differently:

> By the time efforts were made over the next couple of months to set up a meeting and it was really difficult to do so, and we offered to meet with both parties, which resulted in a meeting which was quite heavily stacked with environmentalists and quite confrontational - probably, maybe even more so, so setting the stage for the hearing. [1]

At the hearings Unocal maintained that they had been honest and forthcoming in all communication with the Lubicon. However, Fritz Perschon stated that the hearings failed to do the two things he desired:

> come to a common understanding of the merits and the effects of this plant, and a repairing and building of relationships with the Lubicon Nation. I don't believe that either have been achieved and that is very unfortunate given the time, effort and money that has been expended ... this hearing has been more adversarial than I had ever anticipated, so that the rebuilding of relations is going to be even more difficult than I had hoped. [ERCB 1994a: 1759]

Perschon did state that, had he known that the Lubicon did not give approval to the plant, he would never have sought Board approval. Nonetheless, by the time of the hearings, Unocal felt there was no option of moving, for "Unocal has spent 14.4 million dollars in the ground at this point. This plant cannot be moved" (ERCB 1994a: 136).

In Lubicon advisor Fred Lennarson's continual updates on the Lubicon situation, he suggests that "the Lubicon knew all about the cozy relationships (between the Board and Unocal) and didn't expect an impartial hearing ... what they did expect was full public exposure of Unocal's slick dealings" (Lennarson 1995: 2). Of the hearings, a Lubicon source states:

> Well, I don't have no good words to say about them. The hearings ... went against us. And we do have a big concern here about the sour gas plant. People are having, were having health problems. That was foreign to us until the oil companies come into this country. As it is still our land, we never sold it to nobody. We were not conquered for it. [4]

At the hearings, Chief Ominayak said much the same thing, and explained why the location of the sour gas plant is a problem for the Lubicon.

> We definitely don't want the sour gas plant to operate at the location that it's at. It's too close for our people. We made great efforts and we have spent many years in trying to achieve a land base for our people, and the land base here is right next to the sour gas plant, and we cannot afford to take any risks of any kind for the future of our people. [ERCB 1994a: 1149]

While on the public record, it seems that miscommunication and fear of the sour gas plant are the source of conflict, there are many more layers. Many suspected that the Lubicon were politically motivated. For example, Mitch Bronaugh, intervenor from Edmonton Friends of the North, asked Perschon,

> I just want to ask you whether you also feel in any way that you were being used by the Lubicons as a sort of -- for a sort of leverage or something like that in their land claim negotiation problems? (ERCB 1994a: 797)

Each group may have agendas that do not emerge in a confrontational hearing where issues that are raised must relate to the Board's mandate. The Board brought this out at the focus group. "It's not a clean agenda ... eventually the agendas come through. If you just take a snapshot of one hearing, then you might not be as clear - that's one of the fortunate things - right now there are only nine of us on the Board, so we get a lot of experience and we begin to see the common faces, and the patterns - it helps you to distil the thing" (1).

Values

When a public hearing convenes several different cultural groups, very often different goals, values and motivations come into contact and often into conflict. Each group entered the hearings with positions that were seemingly unresolveable. Underlying the position of both

groups are different values for the land, and different worldviews. These came out at the hearings, but because of the adversarial nature of the conflict, people did not feel these differences were respected or understood.

The values underlying Unocal's operation are straight forward. Strong return on investment, which includes smooth operations, and fiduciary responsibility to shareholders. An investment of $14.4 million had been made in the plant, and Unocal did not feel they could recover from such a loss. Perschon began the hearings with the following commitment:

> I would like to start off by giving my personal assurances that Unocal Canada is committed to operating ethically and in an environmentally sound manner. For us, good business means a good responsible neighbour. That includes open and honest communication, a commitment to managing our operations and businesses in a way that respects the people and the environment where we operate. [ERCB 1994a: 131]

The Lubicon feel that there is much more at stake for them if this sour gas plant continues to operate. Ominayak comments:

> I don't see how those two -- we can live side by side with a sour gas plant and to have all those effects on our people. We have got enough -- there is enough sickness with all these kinds of sickness that's new to our people at this point, and you know, we've got a whole lot of oil activity surrounding us. We got all kinds of flares all over the place and we've got the pulp mill to the west of us. [ERCB 1994a: 1222]

The Lubicon feel that their health, culture and safety is threatened by this further encroachment onto their territory. The Lubicon link the health of their environment to their cultural, physical and spiritual health. Ominayak states,

> If you kill the land, then you are killing the animals or if you destroy the water then you are killing everything. You know, it is a cycle that is there. You break one part of it and it affects everything else. [ERCB 1994a: 1589]

The way of life for the Lubicon has dramatically changed since the first road came through to the community in 1979. Until then, most of the community was engaged in hunting and trapping. Within ten years, the traditional territory of the Lubicon was laced with roads and industrial intrusions.

> It is like night and day. My people were basically self sufficient. They didn't have no welfare. They didn't know what welfare was, until the oil companies started to come up and build roads into this area. And started to destroy their way of life, and basically take the meat off of their table. [4]

The intrusion of oil and gas companies is linked to a change in animal health and population levels; "the wildlife, it has been heavily affected here in our land. We know that. Our people lived off the land a short time ago. That's all altered, changed. Since the oil companies came into our land" (4).

Although they identify many changes in animal populations and environmental health, the area is still used by the Lubicons. "We still use plants, herbs - for healing purposes, roots, various trees and willows" (4). There is much concern that continued industrial activity in the area will further compromise the health of the ecosystem. The Lubicon feel that their well-being has been balanced against economics. At the hearings, Ominayak stated,

> So I don't see how we can compare a lot of the different things, for example a sour gas plant versus life. There shouldn't be any question on anybody's mind as to, you know, the seriousness of this so-called sour gas plant. There should be absolutely no question about it at least from my view and from my people's point of view, but there are people who say for the benefit of Albertans or the general public that we've got to have that gas even if we have to lose life. One life is more than -- is worth a whole lot more than a sour gas plant to me. [ERCB 1994a: 1223]

Bishop refers to the continuing operation of the Unocal plant as "emotional and spiritual abuse, it is the further theft of their land and their resources ... It increases the sense of disempowerment, it discourages people from accepting responsibility for their lives" (3). While these companies and the Albertan public are receiving the benefits of industry, the Lubicon feel that they receive nothing.

> The oil companies have taken up to something like 8 billion dollars off of our land. The Lubicon never got a cent out of that. We would like to be treated fairly and get some of that resource so we could start building our community and start living above Third World conditions. [4]

While Unocal employees may value the area for more than economic factors, it is clear that the Lubicon value the area for many other reasons. Their consideration of effects on the area are broader than Unocal, for they include a longer time perspective than industry (since the road came through in 1979), economic factors, as well as the spiritual and physical health of the community.

At the hearings, these different values for the land emerged. In the final decision, the Board acknowledged that further industrial activity would have effects on the Lubicon, but weighed these impacts against the public interest.

> The traditional life style of the Lubicon members was also mentioned as being at risk, primarily as a result of the increased level of development over the last two decades. The Board recognized there has been some social impacts brought about by industry, but it must also be cognizant of its responsibility to regulate the energy industry in the overall provincial public interest. The Board concluded that the plant would have no undue impact on the people or the environment in the area. The Board believes that considerable economic benefit could be gained and the social structure of the band stabilized if a measure of co-existence could be mediated. [EUB 1995a: 3]

The Board evaluated the public hearings as fair, but atypical (1). They had already granted a license to Unocal to expand the gas plant, based on representation by Unocal that there were no concerns about it. When the Lubicon indicated that they had not agreed to a sour gas plant, but only to an expansion of a sweet gas plant, the Board re-reviewed the application. This is not normally how public hearings arise. Section 2 reviews the miscommunication that led to this application leading to a re-review.

Miscommunication was the stated direct source of conflict in this case; the Board attributed the miscommunication to cultural differences. The next section reviews the obvious and subtle cultural differences that hindered communication between the groups both before and during the hearings.

SECTION 2: RISK COMMUNICATION

This section will focus on various levels at which miscommunication occurred between the Lubicon and Unocal. At fault also may be the lack of intent to communicate, but this section will concentrate on other factors. In this case, miscommunication arose through differences in the technical comprehension of risks, and through cultural differences such as language, behaviours, values and worldviews. Communication may also be impeded through the structure of the conflict resolution process. It is my argument that attention must be paid to all of these levels if effective cross-cultural communication is to occur. While the beginning of this chapter identifies and explores these levels of communication, the latter half addresses strategies for dealing with these problems. These strategies are not quick fix answers, and while they address many of the barriers to communication, there are suggestions by some individuals that some of the gaps in communication are systemic and would require structural change.

> The Board maintains that an applicant should consider the concerns an affected party may have with a project and address those concerns. In doing so, the applicant should recognize the ability of the parties to understand the basic nature of the operation. In the case of a sour gas plant, the Board would expect an applicant to discuss the impacts associated with such a plant, whether real or perceived on the environment. [ERCB 1995b: 18]

The basis for the Lubicon objection to the sour gas plant is that they did not give their informed consent to the construction of the sour gas plant. Securing of informed consent is a central issue. This becomes even more problematic when the information must be transmitted across perceptual, linguistic and cultural divides (Usher et al. 1995). Out of the transcripts and the interviews have emerged many of the reasons why the Lubicon feel they did not give their informed consent to the EUB.

Technical comprehension of risks

In their final report, the EUB accepted that the Lubicon were unaware of the nature of the plant, but they attributed the cause to a cultural gap. Unocal, on the other hand, saw this gap differently:

> there is still a gap between the technical analysis and the technical understanding and the community level of understanding that hasn't been properly bridged yet. We work on that every day in my business, and I tend to be the spokesman that tries to interpret the engineering analysis and explain it to people in communities. [ERCB 1994a: 972]

Unocal tended to frame the problem of understanding as one of a lack of technical understanding. Although they recognized that people in Little Buffalo are "genuinely concerned", they feel that there needs to be a greater effort on the part of all parties to "put the real risks associated with that development in proper perspective" (ERCB 1994a: 969). In meetings before the hearings, Perschon "went up there to share some technical information, hopefully get some information back in return to determine just what the real concerns were and why (Ominayak) felt that this sour gas plant was going to kill his people" (ERCB 1994a: 808). But, Perschon felt disappointed in his efforts, for what he saw was,

> instead of knowledgeable people trying to relieve their concerns, people are continuing to flare up the concerns as something more than what they are, given the emissions from this plant .... yes, people have a right to be concerned. But they also have a right to have those concerns alleviated and I don't see a lot of help from people who are very knowledgeable. [ERCB 1994a: 791]

Those with the information and power to divest it often frame the communication process in such a way. They see communication as a process of transmitting information to the receiver. It is possible that there are technical or scientific grounds for a serious concern about safety. Yet those who may hold this knowledge need to understand why those who see themselves as affected may be unable to accept any validity to the scientific knowledge. While there may be some gap in the community's technical understanding of a project, framing the question in such a way places the blame for a lack of understanding in the community. Reactions to this kind of framing are often intense, as is evidenced in Schacter's (the lawyer for the Lubicon at the hearings) statement:

> What does communication mean to the Unocal functionaries? I think it meant -- basically from what I am hearing at the hearing, my view is that basically they are meaning we want to sit down and talk with these people and tell them things so they will understand like we do and they will agree with us. The plant is not going to hurt them, and if they will just listen to us then they will see the light and come and let us reason together. That's a very one sided idea of communication, and it basically is insulting and it assumes the other person doesn't have anything of value to contribute. [ERCB 1994a: 1927]

The EUB Act charges the Board to ensure that any party that may be directly and adversely affected by a Board facility application decision receive full and clear details of the application; the opportunity to identify concerns respecting the application; furnish evidence respecting impacts expected to be associated with the project and a fair opportunity to have those concerns addressed (ERCB 1994d).

On the surface, Unocal's communication record meets many of these criteria. Unocal furnished most of the details concerning the plant, and provided opportunities for the Lubicon to address concerns. However, it is clear that they did not solicit information from the Lubicon (such as traditional knowledge about moose populations). At public meetings, Unocal brought experts and doctors along to assure the Lubicon that there would be no ill effects to their health; however, they did not establish a dialogue. The meeting served to further polarize the two groups. Minutes from the final meeting that was held in an attempt to resolve the conflict before the hearings record Chief Ominayak's closing statement as: "the help we need from Unocal is to get your plant out of our territory" (Lennarson 1994).

Technical and community comprehension of risk

> The Board characterized the divide between the groups in the following way:
>
> We had one group who were arguing their case using very complex scientific models, with strange names with all sorts of numbers and diagrams. And the opposing sides were using emotion, I guess, or their life experiences and fear. And the twain didn't meet and we had to really work hard to bring that together and maybe we didn't succeed. But that was the problem; we had a non-technical aboriginal group who were speaking from the heart and the other world was a very, very complex technical argument. [1]

Although it would be simplistic to conclude that the Lubicon were only speaking from the heart, the Lubicon acknowledged they did not understand the technical information. There were a number of reasons for this lack of understanding. During the hearings, Ominayak said, "we are interested in technical information, but you might as well be speaking Japanese the way it is written now" (ERCB 1994a: 1540). Ryan broadens this issue past one that involves aboriginal groups alone, for "not only the Lubicons but other people assume that expansion of an existing plant means that the plant will continue to provide the same service or function and not that its function is being changed in a major way" (ERCB 1994a: 688). The decision by

Unocal to not provide all of the technical information about the sour gas plant contributed to the problem. As a result, the Lubicon did not have the option of hiring someone to help them understand the nature of the plant.

The gap between the groups is based on more than just understanding of technical information. The assumption that laypeople cannot understand technical information communicates an embedded stereotype, somewhat paternalistic, to the Lubicon. Joan Ryan, supporter of the Lubicon, suggested that this oversight, "inferred that the Lubicons couldn't possibly understand what the application was about" (ERCB 1994a: 695).

The misunderstanding runs deeper than this. Although there was a definite gap in the technical understanding, there was also a cultural gap. One of the most obvious levels of cultural difference lies in language. In this case, there are two levels of misunderstanding due to language difference.

Recognizing cultural difference

Reference to cultural difference in communication needs to be explored further, as it was identified as the cause for disagreement about the sour gas plant. To determine whether cultural difference really is a sufficient explanation for this disagreement requires a deeper investigation of what each group means when they speak of cultural difference. Another overt way in which cultural difference was noticeable (other than language), was at the level of behaviour. The Board was keen on drawing these kinds of differences out, and spent time in the cross-examination periods questioning supporters of the Lubicon on this subject.

Culture as behaviour

Elaine Bishop, who lives in Little Buffalo, spoke of the "two cultures coming together and not understanding ... each other very well" (ERCB 1994a: 1110). In her testimony and through cross-examination, Bishop suggested some of the overt ways in which cultural differences are noticeable. Her description derives from her experience living in Little Buffalo. She refers to the meaning of eye contact, time, silence, shyness and communication.

> I am aware right now, for instance, that I have been living for over two years in a culture where direct eye contact is exceedingly rude and very intrusive. I am also aware in dealing with non-native culture that direct eye contact is read as honesty and openness. [ERCB 1994a: 1081]

> Time goes in different flows in decision-making in First Nations communities in my experience. You take the time you need to make a decision that involves everybody. Its not just a process of me convincing you that my position is right. It's an assumption that we want to make a decision that benefits the entire community; and the entire community includes plant life, water, air, the animals, not just the human beings. ... There's an assumption behind a term like "Please fax us" ... about what the result of the communication is going to be rather than let's get together and talk and exchange papers and see what the right decision is for all of the situation and so that process of decision-making and that process of coming together doesn't presume the outcome. [ERCB 1994a: 1083]

> Silence is much more accepted in Lubicon and other First Nations cultures. [ERCB 1994a: 1091]

> Part of my experience is that many people in the community are extremely shy, and so there needs to be a process of getting over that, that initial contact, which often takes more than hours. [ERCB 1994a: 1096]

> A lot of the communication is informal through family networks, extended family networks, with the elders' council, and the councillors go out and talk to people in the community and then come back and have council meetings. [ERCB 1994a: 1118]

These are a few of the obvious behavioural and structural differences that may account for the cultural gap between Unocal and the Lubicon. The Lubicon are the object of this attention, as members of the Board and industry were apparently unfamiliar with these aspects of aboriginal culture. Although Bishop interpreted the meaning of certain aspects of Lubicon communicative styles to the Board, there was no discussion of the cultural meaning of behaviour of members of the Board or of industry. This is likely because Unocal and the EUB are familiar with each other.

Worldviews

There are more layers of culture to peel back in this encounter between the Lubicon and Unocal. One intervenor drew out the level of worldviews:

> The nitty gritty, it seems to me, also includes perceptions, different points of view, different lifestyles, values, different societies and I think that improved understanding can reduce tensions and I think that that's very important to understanding the meaning of technical evidence. [ERCB 1994a: 818]

This statement refers to more subtle and less accessible aspects of culture. For example, the Lubicon felt at the hearings that the Board and industry valued money and economics over Lubicon health and lives. In this contrast is embedded a clash of goals, for while industry wanted to process gas, the Lubicon saw that goal as antithetical to their desire to protect the land and continue to live in this area.

All of the different groups seem to recognize this difference. One member of the Board referred to a "clash of cultures - on the one side, there was a different culture from a native point of view, (and) there is the white man's culture which has also its own value sets and I think that's one thing that made [communication] more difficult (1).

Representatives from industry also clearly recognized this difference. For example, Rodych from Amoco stated:

> it gets very very difficult because there is a triangle of government and natives and industry. And we are trying to deal with certain issues, because we have one objective and it is to do business or to drill a well in a specific area. While you are doing that, there are active discussions going on with respect to treaty rights, and land claims. And you can't just push that aside. [8]

This analogy of the triangle, where the values of the different groups do not always concur, is often drawn to discuss the relationships between the various groups. Each time it is mentioned, the different perspectives and goals of each group are also invoked. Chief Ominayak stated:

> we have different perspectives. What we have got to try and look at is try and survive in a different lifestyle altogether. Now, we don't know what all that entails, but the fact of the matter is our way has been destroyed by all the development that has taken place. [ERCB 1994a: 1353]

The worldview differences apparent at the hearings continue to be reinforced, primarily through the statements of the President and General Manager, Fritz Perschon.

Traditional and scientific knowledge

The differing perspectives of the groups are reflected in their accounts of the moose populations in the Lubicon territory. The Lubicon took great exception to the wildlife studies that Unocal had commissioned. "One of Unocal's ... experts claimed that there are 6, 000 moose in the area. Our guys are hunting and no one is getting anything. How can we believe

such Unocal experts" (Lennarson 1994: 27). This comment reveals how traditional knowledge may disagree with scientific estimates. As a result of this conflict, the experts are discredited in the eyes of the Lubicon. The observations of the Lubicon contradict scientific counts. The counts conducted by Unocal rely on aerial surveys, whereas those of the Lubicon rely on direct experience from observations.

Unocal's biologist stated that "big game surveys do not indicate any unexpected or abnormal long-term trends in this population; I can't say that there is any significant impact from the oil and gas industry on the wildlife" (ERCB 1994a: 178). At the hearings, Unocal scientists acknowledged that they had not spoken to Lubicon trappers and hunters. At the hearings, trappers testified that trapping has decreased dramatically in the past years, and they attribute the cause to the effects of oil and gas extraction in the area. Suggestions were made that local knowledge in this case is more reliable than scientific evidence. Elaine Bishop stated, for example:

> That particular hearing itself, would have been more fair if the evidence of the elders, who have lived off the land, who have had to feed their families off of it. I mean these characters up on the bench, they have always been able to go to Safeway. Now, I know that some of them did hunt, and talked to me about that .... these people have not had the option of not hunting. If they did not find food, their families did not eat. I think they are likely to know this land a little better than these characters who haven't lived in it so intimately. [3]

The Lubicon rely on country food as a fundamental part of their diet. Any alteration in the health of the moose population will affect the health of the Lubicon. Many of the Unocal representatives invoked their own experiences of hunting and generalized their observations. For example, one individual said, "with urbanization, hunting is no longer our way of life. I was raised in a small town, and of course, my father hunted" (ERCB 1994a: 900). This individual made the assumption that his way of life and the concurrent decrease in dependence upon hunting is a universal situation.

The disparity between these two groups is apparent through these conflicting reports on wildlife. While the presentations at the hearings are entirely oral, Unocal's presentations referred to technical evidence and documents. On the other hand, the oral presentations by Lubicon referred to their first hand knowledge of the environment. The Board referred to this difference; "one side is using scientific models, and the other side is using emotion" (1). The

Board can access more easily the scientific and Western model of understanding, which is often accorded objective and value neutral status. The Lubicon's form of knowing was not accessible to the Board at the hearings, as it is unfamiliar, often undocumented and not given equal status to science. It is now well documented through studies by aboriginal communities and anthropologists that traditional knowledge can serve to complement, contradict or augment scientific analysis. Its foundation relies on a different epistemology and set of premises. However, it is often seen as anecdotal, unreliable and nonreplicable.

Inherent in the structure of the hearings is a bias towards documented and scientific knowledge. This bias excludes knowledge and information that may be key to assessment and management of an area.

Culture and the Board

The communication gap about the nature of the plant was cleared up before the hearings, but during cross-examination, clear communication was still not achieved. Ryan, stated, "most of us who were intervenors for the Lubicon Nation found (cross-examination) very, very distressing, not only for ourselves but for the high price that the Chief had to pay for being treated in such a culturally offensive way" (ERCB 1994a: 1914). The method of questioning by the Unocal lawyer was described by all aboriginal and academic sources as offensive and culturally inappropriate. This issue will be explored in Section 3.

Problems identified by the Board

In the focus group, members of the Board stated that they would appreciate suggestions on how to alter cross-examination. They recognized many of the differences in behaviour due to cultural difference, and indicated that they were interested in knowing more about aboriginal culture. Two examples from the focus group of this interest in gaining information on aboriginal culture follow.

> With the cultural differences there was .... differences in delivery, differences in understanding data, and in the weight to give data versus anecdotal evidence, that kind of thing. [1]

> I think it would be beneficial, particularly with First Nations, for us to have an understanding of their culture, and for them to know that we are interested in understanding their culture. That assists in communicating - you know that we have

> attempted, not to agree with everything they say, but to have an understanding of what their culture is, to have an understanding that when you are at a table, eye to eye contact, those types of things are - are not favourable to them. They don't do that, those types of little things - I think would assist, particularly with First Nations. [1]

The Board also identified a number of areas they did not understand relating to the organization of the community and appropriate ways to communicate and interact with an aboriginal community.

> We did make a trip to Peace River - to try and get some sort of feel for their community and the plant site. I think even something as simple as that, may have been easier if you have more cultural knowledge, and certainly education plays a role. Do you ask the Chief when you can come out to visit Peace River? Do you wait to be invited? So something even as easy as that could have been made a bit easier through education. [1]

> Dealing with aboriginals is not so different really to farmers, although we do have some trouble knowing their decision making process - like for instance how do you know that you have talked to the right person? We assume they have committees like we do. [6]

These statements indicate that the Board lacks familiarity with aboriginal culture and the issues that they face.

> And I think, when we are dealing with farmers, we have a lot of staff who have grown up on the farm, and I tell ya that - that has helped us a lot. A lot of farmers - that I think you can communicate with, and I also think it helps the Board evaluate the issues as well, so I think that if we attempted to get that type of understanding of their culture, I think that would really assist in communication. [1]

Farming is part of the cultural heritage of Board members. Many have farmed, or were descended from farm families. None of Board members had similar connections with aboriginal life.

One of the specialists interviewed did not cast the issues in cultural terms, but instead referred to the differing interpretations that individuals arrive with in a dispute. In current adversarial processes, there is no time for the participants to come to a common understanding of terms and issues.

> That's what the recommendation is - we need to sit down and talk the same words. We're not talking the same words. And all our actions going into the process are different. [2]

> We all have different interpretations of environment and those differences cause a lot of stress. How you see it, and I see it - you think they have to be seeing it the same way, but it is only after a lot of discussion that you come to see it the same way. [2]

The communication gap cannot be ascribed to cultural difference or lack of technical understanding alone. Other reasons were suggested by the Board which have more to do with the process and intentions of the participants. "We have to keep in mind that for people to communicate, it has to be a two-way thing - it has to be an ability to convey information, there has to be an ability to receive information and to distil that and then to respond to it" (1). Also, both parties need to have the desire to communicate, something that was not always apparent on both sides both before and during the hearings.

Improving cross-cultural communication

Reasons for the gaps in understanding varied, so also did the ideas promoted by each group for improving the process of communicating. The changes derive from each group, with commonalties in recommendations. Changes are also targeted at every group, not solely to one party. Participants in this research have identified a number of areas that require attention in cross-cultural contexts. These are issues of language, cultural difference, amount of personal contact, and participation in decision-making.

The technical understanding of risks

The changes recommended throughout the transcripts and by the interviewees for this thesis are directed to overcoming the gap between a technical and community understanding of risks, and to overcoming the gap between cultures.

Recommendations about communication and language refer to both how documentation appears, and to how it is presented. For example, Joan Ryan suggested that the technical documentation needs to be written in plain English instead of technically-specific language. In reference to public notices, Ryan stated:

> I noticed in the photocopy of the Notice of Decision .. I would not have known before the description of the land, which to my layperson's eyes was a string of numbers and letters, it didn't give me any reference points. Those lines were imposed on Lubicon traditional territory and are not the Lubicon way of understanding their land, and so to ensure that communications are based on information that's understandable to people, on the Whitefish Road 26 kilometres Southeast of Little Buffalo might have been a

more helpful description in addition to the legal description that may need to be there for other purposes. [ERCB 1994a: 1126]

People also recognized that technical jargon cannot always be avoided. To this, the suggestion is made that "somebody needs to interpret the English of these applications, because they are very technical, and to just sit down and say this is what we are doing, this is how large it will be, it is sour gas ... maybe the Board could provide some expertise to the local group that has to make a decision" (ERCB 1994a: 696). Another suggestion was to create a dictionary of technical terminology for the layperson (3). This needs to be done in consultation with various publics to be sure that it was effective, yet accurate.

Overcoming language differences and different comprehension of risks

The former suggestions deal with the language of the application; a related issue is the different languages spoken at a hearing. To this, Ryan suggests the following: "I think it might be a good policy to have such documents presented orally at meetings in the local language, and an interpreter could have been used to make sure everybody understood what was being said" (ERCB 1994a: 693).

Another intervenor at the public hearings suggested that the EUB either have someone on staff who speaks Cree and Dene or has access to someone "who is aware of cross-cultural issues ... who could make double sure that any subtleties in the English language were understood by people who had a mother tongue, an indigenous mother tongue other than English" (ERCB 1994a: 507).

In contrast to these ideas is a Board staff who does not perceive there to be a difference in meaning and language at the hearings: "I don't think there was a problem in translation that I could see. In other situations I have seen problems. To demonstrate that, when they did have an interpreter, the person answered the question before the interpreter gave the interpretation. I don't think there was a communication problem in terms of meaning and language" (1). Although this individual felt there was no problem with communication, it is often the case that technical information does not cross linguistic divides and may even confuse understanding.

Vince Rodych, Manager, Communications and External Affairs in Amoco, recognizes the role of developing a common language in the process of risk communication, and suggests

that this issue must be addressed before negotiations can seriously begin: "we spent a lot of time just getting down to a common language just so the native group understands the limits on our role" (8).

Another member of the Board clearly recognized that this issue of language is important and admitted that innovative approaches are required:

> we thought we should maybe publish this in their local languages. We thought of some way of speaking with them in their local language, on their terms, about the report. [1]

All of the different groups recognize that dealing with language differences (either technical or Cree or English) is only part of changing the way risk communication occurs. Another level that participants addressed is the issue of personal contact. Bishop stated, "I think the face-to-face communications need a longer process" (ERCB 1994a: 1081). The EUB referred to a need for personal contact and one individual had the idea of "personal contact through a video, of the process that has been screenplayed ... it might help them make sense" (1).

The focus in many of the interviews with industry tended towards developing relationships with aboriginal communities. Although each company has approached developing relationships in a different manner, they all agree that it takes much time. Bob Blair links this investment of time to effectiveness of agreements; "some of these things take longer, but in the end they are more effective" (7). A representative of Suncor reports that "so long as you talk to them about (problems), they don't have a big problem ... you have to try to deal with these things in an open manner. And then you defuse the problems. People can understand problems; they just can't understand you trying to hide problems" (5).

An individual who was involved in the Alberta-Pacific hearings reflects that consultation is insufficient for communities; he advises industry and government to provide "the opportunity to get involved - direct participation, if a company is going to come in, then get the community involved in preparing the site, clearing the site, monitoring" (2). Chief Ominayak also advocates participation, but on the Band's terms.

> We didn't believe in helping outside people coming in to destroy our environment ... they were doing the job themselves; they certainly didn't need our help. And the reason that we were looking at the possibility, for example, in clean-up and when we speak of restoration, to try and help and bring some of the environment hoping that in that area

> enhancing the environment as much as possible we are able, to assist, bring back some of the wildlife that we had hoped would be there. [ERCB 1995a: 1148]

Recognizing and accommodating the cultural gap

Suggestions for dealing with the cultural gap vary widely: the representative from Amoco indicated that "we're in the business of doing things faster and better, and it is a big cultural shift to recognize that you can't always do things faster and better and get them done" (8). Emphasis is placed on a shift in perception and understanding on the part of industry and regulatory bodies in the way that they work with aboriginals. This is echoed strongly in the Lubicon arena during the hearings. Joan Ryan suggests that "at some point non-natives have to take responsibility for decisions which are made which affect the livelihood of people" (ERCB 1994a: 687). Further, she states that "industry should do their homework, and learn something about the lifestyles and go through a collaborative discussion of possibilities of development with First Nations people in ways which would be directed by them and not incompatible with their lifestyles" (ERCB 1994a: 85). Chief Ominayak states that this is what his Band tries to do:

> what we were trying to do is to try to communicate with people within that area to have a better understanding and hopefully a better appreciation of the problems that existed and the kinds of many problems that were imposed on our people. [ERCB 1994a: 1334]

Elaine Bishop's comment mirror this idea:

> I would encourage any company that is going to do development on First Nations' lands to try and really get inside that understanding of the land and what it means to people, of how people belong to it, and what is done to it is done to something that is a living, breathing entity on which the health of our people as well as the children of First Nations need to depend. And it is from that profound understanding of the different cultural premise about what that land is and therefore what drilling oil wells, putting in pipelines does to that, that's the profound understanding from which the communication needs to begin. [ERCB 1994a: 1129]

When asked about how to achieve this understanding, Bishop answered:

> I think they do that by relearning or learning their history; by spending time on land depending on it for their livelihood, not just a day or not just a weekend; by building friendships with people who live with the land in that way, which means not taking, I mean, setting aside their own interests in that for a period, and it may not be something that can be done in a month or six weeks. [ERCB 1994a: 1130]

These suggestions would require a major personal investment from members of a corporation. This is one factor that many of the corporate sources mentioned.

> You have to have people who respect the native people as individuals ... and then you send them out and give them the authority to talk reasonably. [7]

From Amoco, came this comment that reflects on how individuals are the key to change.

> The thing that has really made the difference is that there are probably about three dozen people in the company who have decided to make it work on a personal level ... by the nature of their work and where they are doing work, they have decided that it is important personally to advance the cause. [8]

Back at the hearings, suggestions for bridging the cultural gap again refer to behaviour and education. On a symbolic level, Ryan suggests that the Board and industry should reflect on how language and body language communicate things like power, disdain, and lack of respect. This implies a more complete knowledge of their own communication habits, and greater familiarity with the connotations of Cree communication styles.

The Board's approach to cross-cultural communication: Past and future

The Board is willing to change their risk communication strategies in a number of ways. Those changes deal with their own education about aboriginal culture and with education of aboriginal groups with respect to technical issues and their experience of public hearings. While some of the staff felt that structural change is not required, others indicated some areas where improvements could be made (e.g., technique of cross-examination). As an indicator of their flexibility, one individual drew on prior experience, a case where the Board was flexible in allowing a sweetgrass ceremony at a hearing. "We were certainly flexible in terms of trying to bridge this cultural gap in accommodating their wishes, so long as it did not disturb the process" (1). Some stressed that they have attended seminars and conferences on aboriginal culture, but that more training would be beneficial.

With respect to education of aboriginal communities, members mentioned that aboriginals did not seem comfortable at the public hearings. They suggested that a video that explained the process may help them to understand it better.

Industry and cross-cultural risk communication

Both industrial representatives and the Board indicated that internal cultural education is an area which they need to develop (5, 8). Amoco already has a course which they call, 'Indian 101', taught by two aboriginal women.

> There's the basic history and cultural teaching that can move an Amoco employee a long way to overcome some of their preconceived ideas of what the issues are. There are some very standard kinds of issues such as, natives want a handout, they are lazy ... stereotypes ... And the other part is you can break down some barriers by getting those people to express what their biases and stereotypes are. [8]

Amoco has actively pursued proactive strategies for conflict resolution in the last years. It was stressed that negotiation cannot occur until "you have an appreciation of aboriginal culture and history, and some of the dynamics that are at play there, in terms of their own political system, then you can't even begin to enter into a consultation that is needed" (8). Others, such as Suncor, seek this kind of knowledge. Through seminars, focused on the culture and present society of the aboriginals, a better understanding of the problems their communities are facing can be developed (5). These issues are clarified and focused on in Section IV.

Cultural awareness training is only one step

Reactions to the internal cultural training idea vary. For example, the Lubicon representative stated:

> Well, I don't know, it would depend on the consultant. They would have to work independently and not be directed say by the provincial government how to conduct their studies. I don't know, I think the First Nations people in this country have been overstudied. And I don't know what else they would find about us. [4]

This same individual expressed some cynicism about the reasons that corporations may have for wanting this cultural education.

> Okay I will tell you their way of thinking. All of a sudden they want to come up here to see things and learn our ways. Now the only reason for that is that they may be getting a little bit of static from some foreign corporations. Because we are putting up a fight up here. [4]

Another aboriginal source stated that cultural sensitivity training is unnecessary. What is key is not training, but participation.

> I'm not asking you, I'm not gonna go in there and train you, or your safety people or your upper management people about what my ways of thinking are - Unocal might

> not be interested in that .... All I want to do is ensure my participation in that, you just hire me and train me to monitor what it is that you're doing on our land. [2]

Suggestions throughout the hearings from aboriginals and specialists suggest that in dealing with another culture, knowledge and sensitivity of the culture are not enough to ensure informed consent and fairness. Meaningful change to many participants would involve having aboriginal people working in the EUB to setting up an elders council that would be involved in cases of dispute over traditional territories (2, 3, 9). Bishop states:

> An elders council may be able to give wisdom. Now, I think there might be a real challenge in that because the history of relationships between our peoples has led to a level of distrust so that sometimes those who go and work for resource extraction companies are perceived as working for the enemy because a lot of land destruction has taken place because of that, and so we may need a long process of going, building the trust that enable those things to happen. [ERCB 1994a: 1132]

Further, the lack of representation of First Nations in the EUB is mentioned. Were there to be representation of aboriginals among the decision-makers, then their perspective would have internal support. This need not be a full-time appointment. The aboriginal band could be involved in cases where aboriginal concerns are likely to be an issue. This kind of composition is not unprecedented; both the Broken Hill Proprietary Federal Environmental Assessment Review of diamond mining in the Northwest Territories in 1995 and the Alberta-Pacific Environmental Review have included aboriginal representatives and specialists with knowledge particular to the case. The challenge with this recommendation is to ensure that aboriginal representatives carry respect in the aboriginal community, as there is a long history of governments fostering and exploiting divisions among aboriginal leaders.

The conclusions of many specialists and aboriginals are that aboriginal perspectives will not be understood and integrated without some structural change in current process. This is referred to in greater detail in Section 3.

SECTION 3: THE EUB DISPUTE RESOLUTION PROCESS

In the introduction to this thesis, procedures and guidelines for the EUB were outlined. These principles provide the setting for energy resource use in Alberta. In this section, I present a more detailed picture of the dispute resolution process in Alberta by presenting perspectives of those involved directly and those affected by it.

In my examination, no coherent perspective emerged from participants about the current system for resolving disputes. Disagreement was apparent within each sector, and overlap between the groups was common. For example, participants were asked, what are the strengths and weaknesses of the current system of dispute resolution? Fairness, flexibility and the Board's ability to empathize were all identified by the Board and industry. In the Lubicon and specialist arena, the fairness of the current process was debated. These individuals suggest that in cross-cultural disputes, the Board cannot be fair because they are not familiar with the culture and needs of aboriginals. Although the Board is an independent body, participants feel that the Board is closer in values and culture to industry. Until the culture and goals of aboriginals achieve direct representation in decision-making, these participants feel that decisions will not be fair. The latter half of the section is devoted to identifying specific areas of the quasi-judicial system that are not considered culturally appropriate by various participants. To many of the problems identified, participants suggested strategies for change.

Three perspectives on the process

The Board and industry identified many strengths of the current dispute resolution system. The characteristics that they identify are fairness, ability to listen to many parties, flexibility, and resolution of conflicts. The Board felt that they are able to accommodate the different cultures present at public hearings. There is a coherent view of the EUB dispute resolution process from aboriginal and specialist perspectives. Although they accept the process as a reality for resource management, many feel that the current process does not integrate aboriginal perspectives. Lubicon sources indicated that the public hearings were frustrating and difficult to participate in.

Industry

Views of the process varied amongst industry sources. One of the more optimistic views of public hearings and their role came from Suncor.

> Public hearings are there so that people can go and provide their points of view and their evidence to do with a particular project prior to being given approval ... So that you hear all of the input of people and all of the different points of view and technical evidence and whatnot, before the EUB will approve a development project. [5]

Another view from industry revealed a pragmatism about conflict: "if you go through the proper consultation with an aboriginal group or community group and in the end you still disagree, that's okay .... no one expects that public hearings aren't going to have conflict in them. We are hoping to reduce the conflict" (5).

Blair's comments reflected on the origins and formation of the Board:

> The ERCB, as it was called for most of that time, was very little concerned with these kind of socio-economic or social or cultural issues; in Alberta those weren't regarded as within the province of the Board. The Board's mandate or assignment was perceived largely to be one of good engineering, good conservation, good safety practices, and maintaining competitive industry and the things like native issues, or female hiring policies or human rights, those kinds of things were just not seen as part of the business of this Board particularly. [7]

Many corporate sources affirmed the importance of having an independent party as an adjudicator for unresolveable conflict. Although companies may attempt to communicate with aboriginal communities to avoid conflict, some situations will not be resolvable through negotiations.

> Ultimately, if you ever do get to a stalemate where there is no way to resolve what should happen in an area, there needs to be a process that resolves it. (8)

Similarly, the sources from Syncrude stated:

> That's why the EUB is there. That's why there is defined process with tools. And Syncrude's practice with respect to consultation has been to engage in consultation, but always recognize the existence of structure and process ... it is an alternative. Consultation is great - but the existence of the Board with judicial testing ... is incredibly important. [11]

The EUB

In the focus group, the Board identified a number of strengths of the current process: flexibility, fairness, empathy, ability to listen to the public and the resolution of conflict.

> Fairness, flexibility have all been mentioned; the process leads to a resolution and must necessarily do so. There's clear documentation of what goes on during the process. And that's going to be a problem if there are changes made to the process, that may not allow that. The written decision, I believe we go to greater lengths than most people to try and explain why we reached the decisions that we did. [1]

The EUB emphasize that they go to great lengths to resolve conflict before it ends up in a public hearing. Communication between parties is accomplished through phone calls, letters and meetings. In the field, EUB representatives will meet people "across the cab of a pick up truck" (6). The field staff are often trusted because they try to hire local people who have worked in the industry.

> Before we set down the matter for a hearing, we endeavour very very sincerely, to bring the two parties together, to see if the discord can be harmonized, if we can shoot for win-win. We did that in this [Lubicon-Unocal] case, too, and then, only then did we see the divisiveness prevail and that's when the hearing process was undertaken. [1]

Usually, intervenor status is limited to directly affected individuals. While the Unocal gas plant hearing challenged the Board's mandate in a number of ways, the Board emphasized its desire and ability to be flexible. A large political network participated in the hearings, mostly speaking to political, social or issues of human rights. For example, groups included: Group for Education and Human Rights, Aboriginal Coalition and Edmonton Friends of the North. "On the chance that they might have something useful and constructive to add in what our task was, we allowed them to participate in the process" (1).

The Board places major emphasis on being fair: "we strive mightily to be fair" (1). Further, the EUB must "be fair and also be seen to be fair" (1). They see their work as fair in the Unocal gas plant hearings for,

> at the end of the day, when we noted that there was some major information gaps, the Board set it down for a hearing. And they gave a fair forum, allowed for fair disclosure of information from all parties, and I think that, in that regard it was very much a success. [1]

The concept of fairness is complex, as one EUB source indicated, for "being fair and agreeing with the results don't have to be the same. Like I mean, a lot of people perceive fairness if the result is what their position is" (1).

To the issue of cultural difference, the Board feels that they are able to bridge the cultural divide in a number of ways. For example, at the Unocal hearings,

> certainly with the cultural differences, there was ways of, differences in delivery, differences in understanding data, and the weight to give to data vs. anecdotal evidence, that kind of thing. But I think that in this case, especially the staff tried to be very helpful and we operate within some constraints in how far we can go... [1]

The Board uses interpreters on request and is sensitive to the different manners of presenting evidence in different cultures.

As the EUB is a formal regulatory body, the Board feels that there are restrictions on how much change can occur. The Board is "a creature of statute, and that may be the white man's way in order that we collect data, we want to verify, we want to substantiate statements, in that process to see if they have merit, to see if they have substance" (1). The Board also requires a formal record of the proceedings, which they use as a basis for making their decision. They also feel there are legal limit to how much they can change: "ours is a legal process that is subject to white man's law and if we stretch ... or accommodate people beyond that sense of fairness, we could be subject to a court of law" (1).

Aboriginal and specialist perspectives

Discussions with the First Nations and specialists reveal frustration leading to many suggestions for changes to the Board process in cross-cultural contexts. The Lubicon source had:

> no good words to say about them. The hearings, as you know, they went against us. And, we do have a big concern here about the sour gas plant. People were having health problems. That was foreign to us until the oil companies come into this country. As it is still our land, we never sold it to nobody. We were not conquered for it. And, as far as the Board, I think they are in bed with the provincial government and multinational companies ... they don't listen to the native people and they don't listen to the rest of Albertans. [4]

Further, this individual commented that the aboriginal intervenors are disadvantaged by their lack of funds for preparation, travel and accommodation. The Lubicon did not seek intervenor funding because "in their view doing so would constitute a tacit recognition of the legitimacy of the process, the right of a provincial so-called regulatory agency to approve projects in the unceded territory" (Leitner 1994: 1). The Lubicon source stated that:

> It made it very difficult for my people. Because we are not very rich. We had to travel back and forth. We don't have the funds. We don't have what Unocal could afford.[9]

My interviews with the Lubicon and with other aboriginal sources revealed a strong sense of frustration with public hearings. However, they also revealed that people recognize the process as a reality. The Lubicon position seemed to both recognize and refute the jurisdiction of the Board. Chief Ominayak stated at the hearings:

> In trying to achieve our goal -- it's been a long, hard process and I am not here to try and negotiate a land settlement or anything of that nature. I respect and stated my position insofar as the jurisdictional question is concerned before the Board, but what I am saying is that all these things going on all the time, it's you know, it's been a big burden on our people, it's created a lot of tension and a lot of illnesses that we have not -- we are not accustomed to. [ERCB 1994a: 1224]

Although the Lubicon had much criticism, it is balanced with suggestions for change. At the hearings, Chief Ominayak gave credit to the process and to other oil companies in the area:

> I think that the process we have got now can work and has worked and it has worked in the past. Now, a lot is dependent on whoever we are dealing with. If they are prepared to sit down and try and avoid where there is specific problems, then if things can be worked around, then there is always ways and means to try and satisfy both parties. [ERCB 1994a: 1552]

This comment reveals some trust in some companies in the area, but indicates that trust is dependent on the company acting in good faith and responding to Lubicon needs.

Lubicon response to the quasi-judicial process is mixed; more blame seems to be placed on Unocal for not acting in good faith. For example, one source says, the process "doesn't do anything well - the only thing it does well is protect industry" (2).

Some felt that the focus of the Board hearing is too narrow to deal with the larger environmental concerns held by the Lubicon. They are concerned with the pace and scale of development:

> People like the Lubicon have a ... perception about the environment ... In ten years time, all our logging is going to be done. Then what are we going to do? We're not going to have any oil left, or any forests left - what are those people going to live on,

---

[9] The Lubicon requested that the hearings be held in Edmonton so that they would be more convenient for other intervenors. There were nineteen other intervenors at the hearings; the Lubicon wanted the hearing location to be convenient for them. The Board indicated that they would have held them closer to the Lubicon, but respected the request that they be held in Edmonton. The Board holds hearings in locations convenient to the affected community (ies).

what are they going to survive on. And those are the questions that those people are asking, but that is not what these people are hearing" (2).

The implication is that the worldviews of aboriginals and the Board do not overlap and cannot be brought together at these events. The Board does not understand the goals and intentions of aboriginals.

Limitations of the quasi-judicial process in cross-cultural contexts

Interviewees were asked to identify weaknesses in dispute resolution processes when they are applied to cross-cultural contexts. Sources identified the following areas as problematic:

- the mandate of the Board does not incorporate different notions of environmental impact;
- the costs of hearings can be large in comparison with more informal ways of resolving conflict;
- the public hearings process is not an appropriate forum for all resource and environmental disputes;
- aspects of the public hearings process are culturally inappropriate,
- there is no representation of aboriginal perspectives within the Board or its staff, and,
- the Board lacks familiarity with the decision-making procedures and culture of aboriginals.

Informants were also asked to recommend resolutions or changes for the problems that they identified.

Mandate

According to Lubicon and academic sources, the Board's terms of reference are too narrow. Bishop feels that the EUB does not look at the whole picture. For example, she questions their definition of sustainability:

> They have a very narrow definition of environmental impact - they are not looking at long-term sustainability ... so it is a very narrow definition .. that in fact meets the needs of the people who want to extort the resources and run. [3]

Another source concurs with this:

> You can only talk about environmental impacts. Well, what are they? Like one of the things I always argued about - if there is ongoing impacts, there's all sorts of definitions of impact. And they say, well that's not the definition of impact. And I say, well it's not in yours, but it sure is in mine, because it affects us, it's ongoing. [2]

Critics of the narrowness of the Board's mandate suggest that projects need to be assessed in relation to other impacts in the area. "This particular project needs to be assessed in the framework of an analysis of the impacts of all the resource and industrial development in the area and the social stresses that have been caused by both these developments and the unsettled land rights" (ERCB 1994a: 543). Currently, the Board's mandate allows them to separate out the impacts of the gas plant from regional pollution, other projects in the area, and associated environmental and social effects. There is a need for a more effective balance between a manageable scope for the Board and a more comprehensive scope for addressing the complex issues they must address.

Costs

The cost in time, energy and money can be large when a public hearing occurs (1). In a follow-up interview with some EUB staff, costs and time inputs for hearings were estimated. Generally hearings are two to three days, although the Unocal hearings were ten days long and Syncrude's hearing in 1992/93 was 28 days long (6).

Table 1: Rough numbers for time consumed by Board and Staff of EUB for public hearings. Source, interview with EUB members. Note: numbers are estimated by the two staff. [6]

Personnel time	Before	During	After
Staff (6 people)	40 days	2-10 days	60 days
Board (3 people)	25 days	2-10 days	25 days

The figures for the costs are also estimated, and a grand total is not available.

- court reporters.....$1000/day
- sound system.....$500/day

The salaries and expenses of the Board members and staff are paid throughout the hearings. These costs do not include those of the participants and intervenors. The total cost for any hearing will be a function of its complexity and duration.

Both academic and Board sources indicate that pro-active strategies such as mediation or negotiation tend to reduce conflict and costs (2, 6, 7). These processes are generally not as expensive as public hearings (6).

In an interview with two staff members of the Board, they indicated that as mediation and consultation have become emphasized, they have witnessed a substantial decrease in the number of public hearings. The Board merged with the Alberta Utilities Board in February 1995, which increases the job responsibilities of members of the Board. At the same time, they have fewer staff. The result is that there are fewer staff out in the field who are working on resolving conflict "across the cab of the pick up truck" (6). This decrease in contact with communities may have ramifications for how effectively conflict is resolved locally in the future. Both Blair and the Board sources link increased contact at the local level with an ability to reduce conflict (6, 7).

Although these processes may be cheaper, public hearings are still necessary for some conflicts. Although mediation or alternative processes may be effective in some settings, a careful assessment of the groups present, and their goals and needs, is necessary before a process can be selected. An example of how many different forums may be needed to represent interests comes from Amoco:

> At the time we went into the hearing, we had come a long ways in terms of negotiating an agreement. But, in the Peigan's [a Blackfoot group of southern Alberta] interest, they needed to be at that hearing to publicly represent their concerns, and not just do it privately in negotiations with Amoco. [8]

> They didn't go in there as an opponent, but nor did they go in there as a supporter. They went in there to make sure that certain concerns were publicly represented. And, they did that - it was also acknowledged that we were working with them and trying to resolve those issues. [8]

Culturally inappropriate elements of quasi-judicial hearings

Aboriginal and Board sources discussed the setting and style of public hearings. Everyone interviewed commented on the confrontational nature of the dispute. Elaine Bishop accepted that the forum is "what we are stuck with (but it will create difficulties). Microphones, the fact that there are observers, the fact that this is confrontational, despite the best efforts of everybody to not be, it's basically confrontational, all of these make it more awkward" (ERCB 1994a: 1139). An EUB source commented on this formality:

> From a general perspective, individuals have a difficulty with formality. Great attempts are made to make the [hearing process] comfortable, but there is a panel, there is a protocol, there is a procedure. That in itself, people find intimidating, and will stifle

> communication and will ... give people who haven't been involved in the process a feeling that they won't have the ability to give the information that they really feel they could give in a less formal setting ... I'm not sure we could have done anything more with the setting. [1]

Members of the Board suggested that the process could be made less intimidating for aboriginal groups. At quasi-judicial reviews, it seemed that most participants expected a certain level of formality and distance to be imposed.

In an alternative process (i.e., mediation, negotiation), there may be more flexibility in making changes to the forum. For example, Amoco has found that there are different ways to design the forum that may be more effective in cross-cultural contexts. "The whole circle management thing has been very useful, from cross-cultural training as well as us using that training as part of our negotiating process" (8). Amoco leaders were instructed about circle management by the Peigan; it is a style and forum that is familiar to the Peigan, and one that they use when negotiating issues with Amoco. It is a way of arriving at decisions that is based on consensus and is thus more culturally appropriate. Many individuals suggested that alternative processes (consensus-based) may lead to different outcomes.

Lubicon representatives felt that mediation or other alternatives may "stop industry in Calgary, but not up north" (4). Media coverage of industry and activities in the north is often limited, and for this reason the Lubicon did not feel that alternatives to the quasi-judicial forum would leave them in a position of strength. Mediation requires some basis for trust and the long history of conflict experienced by the Lubicon provides little basis for any trust. In this case, the Lubicon were not seeking compromise or agreement with Unocal; they simply wanted the sour gas plant which was being imposed upon them to be removed.

Cross-examination

During cross-examination, the Unocal lawyer relied on a technique of questioning both the personal integrity of characters and of contesting membership of the Lubicon. Unocal brought in an individual who questioned the existence of the band, stating that some of the Lubicon had signed with the Whitefish band (after being missed in 1899 by Treaty Commissioners). This tactic by Unocal suggested a willingness to engage in the broader issues concerning the Lubicon land claim. If Unocal was prepared to attack the Lubicon on these broader issues, they are effectively admitting their relevance to this specific issue, even if the

broader issue went well beyond the Board's mandate. Responses to this issue, and the attack on Chief Ominayak's personal integrity were heated:

> It is arrogant for any group to define who another group is. But particularly [arrogant] of white bureaucrats and lawyers to define who an aboriginal group is. [3]

> Well, to me, it was a direct attack against my Chief, and it was. There is no two ways about it. The way he was cross-examined, there was things that were asked by the Unocal lawyer that didn't have absolutely anything to do with the hearing. For instance, about the Calgary Olympics - what did that have to do with the health of our people? [4]

> It was one-sided ... Like there was a personal attack on Bernard. All that man was trying to do was to save the health of his people. I don't see the premier or the prime minister trying to do that. [4]

> But everything was an attack on Bernard and the rest of the time, I was with the elders council, and we weren't asked directly - anything that was put out there was basically uncalled for - because it didn't have anything to do with anything. [4]

The EUB focus group identified the same problem, and empathized with the Lubicon position, but defended the basis for cross-examination.

> It is there, because if someone makes a statement, and they can defend it, then they have a strong position. But if they can't defend it, then obviously, either the facts or the statement or the argument was weak or maybe it didn't pertain at all. And so, that takes it all away from the political part of it down to, you've survived the process and you still have a strong case, and it may have something to do with the decision. [1]

While some in the Board felt that cross-examination procedures are adequate, specialists in legal process had suggestions for how they might be altered. Asch affirmed the role of cross-examination in testing the veracity of evidence, although he acknowledged that this role reinforces the adversarial tone of quasi-judicial hearings.

> Substantively, the difficulty of an adversarial system is on whom do you rely for credibility? Do you rely solely on the word of the individual? In which case, that's fine, I'm not challenging that. We know people lie. And we are not sure whether it will come out in cross-examination or not. But without cross-examination, it places an awful lot more of a burden on the decision-makers to, without any way of probing the extent to which the person was representing things truthfully. So cross-examination has that role. [9]

Nonetheless, Asch is critical of the process, because it is not culturally appropriate.

> The Australians have been particularly concerned about the tone of cross-examination and they have found certain kinds of phrasings that have been helpful in not challenging

> the authority of the individual or challenging the word of the individual. So that there are ways of asking questions in cross-examination, or what is traditionally cross-examination, that are much more respectful than the way that we do it. And that might be helpful in itself for First Nations. [9]

Larry Reynolds, an environmental lawyer and research associate with the Eco-Research Group in Environmental Risk Management, agrees that cross-examination practices are essential, and are required to assess the validity of knowledge. If the practice were abandoned within quasi-judicial hearings, Reynolds would be concerned that the proponent could not be cross-examined on their technical evidence. Environmentalists often take on the role of challenging the proponent's technical evidence (e.g., Sierra Legal Defence Fund), and it is critical to bringing out mistakes, biases or oversights that the company may have made. However, Reynolds recommends that when First Nation witnesses are being cross-examined, the form of questioning be limited by the Board, and questions asked of aboriginals be carefully controlled. He suggests that it is inappropriate to attack the personal integrity of the witnesses and to cross-examine elders about their authority (10). Another possibility lies in requiring cross-examiners to establish the relevance for their questions to the Board; if the cross-examiner seeks to discredit evidence, he/she must be prepared to convince the Board that this type of attack is necessary to the Board's decision.

Inclusion of the aboriginal perspective within the Board

Concerns with structure of the public hearings process are not limited to the problem of cross-examination. Several sources expressed doubts that the Board structure, without major modification, can fairly adjudicate issues that concern aboriginals. Until the Board has aboriginal representation, they feel it will not be fair. These concerns indicate that cross-cultural sensitivity training is not considered sufficient to guarantee fairness. The final comments by sources in the last section on risk communication confirm this, for one individual states, "all I want is to ensure my participation in the process; you just hire me and train me to monitor what it is that you're doing on our land" (2). Many feel that their culture and worldview will not be represented or understood until they are able to control decision-making in lands that are important to them. Asch states:

> the main thing that I am concerned about is that aboriginals are not, they do not have a structural place in the decision-making part ... I wouldn't call it improving their

> standing, I would say the that it's about ensuring fairness. And I think that they need to be a part of the panel that makes the decision and not just witnesses that appear. And then, furthermore, there needs to be a way of organizing decision making that ensures that they are not just a token player. And that they are not outvoted on the basis of a simple majority. There needs to be a system in place that ensures that their serious concerns cannot be overridden ... and that to me requires some kind of structural way of structuring decision-making in such a way that you can create the conditions so where even if you have one voice, you can stop the process or at least temporarily. [9]

Asch suggests that a panel be created whenever issues arise that concern aboriginals. This panel would need aboriginal representation and require a different decision-making process.

> You will do your best to ensure that there will be a consensus on decisions made, amongst parties. But you will lose simplicity in decision making as a consequence and you might get things tied up if there was no consensus. ... it is a kind of model where what you have is a panel or a legislature that is divided up in such a way that the various constituencies are represented, in this case the First Nations ... you would negotiate with the various parties what matters they could bring forward as a basis for using that procedure, and what matters could be decided on the basis of majority rule. [9]

> For example, if the issue was, the placement of the plant, and this only had to do with for example, with whether you were going to have it closer to one community or closer to another community, which might slightly advantage one party or another party. That might be something that people would say, that's a majority rule thing and we don't care whether both aboriginal people vote for it or against it. But on the other hand, supposing it had to do with a burial ground, then you would say, yeah, if one of the aboriginal parties says, wait a minute, you can't have it there ... In that case it becomes much less of a trivial issue if you have the people for whom, it is really important and they have a special kind of clout in those situations to force people to pay attention. [9]

Reynold's ideas concur with this; he suggests that an *ad hoc* appointed aboriginal panel member would ensure that aboriginals would be heard. He recommends the panel run on consensus, so that a simple majority vote could not overrule the aboriginal voice.

Asch also has a concern about the power balance in public hearings.

> The other side doesn't have the authority to say no. That's the bottom line. You have to be ... clear on the power .... the only thing that the applicant wants is to build something. And if they can't build it, then they will go somewhere else. And the only difference between the two parties is that the people on the other side are going to live there, whether or not this thing goes ahead. There needs to be a balance of forces between the parties. [9]

Inflated expectations of the process

Some interviewees from industry referred to the high expectations that they feel members of the public have of public hearings. Mr. O'Ferrall, lawyer for Unocal, commented that "this is getting to be a bigger problem for the Board where people don't get what they want in the negotiations and then come into the Board to expect them to give them the competitive advantage they haven't got in the real world" (ERCB 1994a: 1708). In contrast, an individual involved in the Alpac proceedings feels that expectations of the regulatory body in achieving resolution of a conflict are too optimistic.

> We're supposed to meet in the middle. Then we can tell everybody - you can go home - well, it's going to be okay. But that's not what happens. Two people come at each other with totally different understandings and we have a body that sits in the middle. And their understanding is closer to industry's - and it is not aligned with what is required by the community. [2]

The goals and expectations of groups will always differ; a pragmatic view of conflict will accept these variances and work towards reaching solutions that are acceptable to some or most of the participants. It may be more productive to concentrate on facilitating understanding among groups.

People enter these hearings with different understandings, and never have the opportunity to come to a common understanding.

> How you see it, and I see it - you think they have to be seeing it the same way, but it is only after a lot of discussion that you come to see it the same way .... Most of the time people never have the opportunity to sit down and talk to each other, except at the meeting, and it is confrontational. [2]

While goals and expectations of groups will always differ, there are suggestions that there are differences that might be addressed in the public hearings process. For example, members of the EUB referred to the lack of aboriginal familiarity with the process:

> [There is] an unfamiliarity with the process, a lack of acceptability or acceptance of the process and ... a problem between the scientific method and the evidence which we tend to get and tend to find acceptable and the anecdotal evidence that is much more difficult to evaluate. [1]

Training sessions or pre-hearings processes could be used to work through these issues of coming to common understanding on terminology and the goals of the dispute resolution process.

Familiarity with aboriginal culture

The Board indicated that they are unfamiliar with a number of aspects of aboriginal culture. For example, the Board discussed the problem of assessing the credibility of aboriginal witnesses and the challenges of interpreting 'anecdotal evidence'. Michael Asch addresses the issue of assessing the authority of a First Nations expert:

> What I would like to see is some attempt made by the EUB to consider that there are ways that they can assess authority in oral testimony from First Nations people. One of the great fears is that there is no understanding that in oral cultures, word of mouth, transmitted from one generation to another can be extremely authoritative, but doesn't necessarily have to be extremely authoritative. So that one needs to know, what are the criteria that are used by that society or that culture in itself to differentiate between those people who have the authority and responsibility to speak and those people who are speaking and don't. [9]

To address this issue, Asch suggests some practical answers.

> That would require some serious work about what the culture is about, not so much cultural sensitivity, as an understanding - as a serious understanding of what the premises are that that society uses to confirm, shall we say, the equivalent of expertise on certain individuals. Because not every individual is considered to be an expert on every subject, in their societies. [9]
>
> The criteria would be used, I have no doubt, although I don't know, but I have a strong suspicion, would be the same throughout most aboriginal communities. There are certain families responsible. You get a group of elders together and they reinforce each others' stories. There are ways that these people tell. [9]

Asch suggests that "different points of view need to be presented in such a way that the decision makers have an idea of how the individuals who are experts are coming to a conclusion about what they have to say. And how strong those conclusions are on the basis of the evidence that they have. And then they can weigh the various points of view and balance" (9). With this kind of analysis done, the Board may be better able to understand the substance of what aboriginals are saying.

Reynolds suggests that cross-cultural understanding may be facilitated through a liaison person who has intimate knowledge of the culture of both groups. This individual could co-ordinate the provision of information and help a community decide when they are ready to go to hearings. Understanding might also be facilitated if communities are provided more time to learn about the issues.

In this section, the public hearings process has been reinforced and critiqued. The Board values the process because resolution is achieved on contentious issues that may not have been resolved in any other forum. Some aboriginal communities have used the forum to publicly represent their interests, even though they have already come to private agreements with a proponent.

Yet, it has also been shown that the structure and process of hearings does not always achieve successful outcomes. In the Unocal case, divides that were already apparent were further aggravated through the process of cross-examination. Participants have stressed that public hearings do not have to result in harmony; however, all participants were interested in a process that does not aggravate existing divides between aboriginal communities and industry.

Many solutions have been suggested that can be applied to the process internally. Perhaps the most contentious is the recommendation that the Board cannot make fair decisions until aboriginals are representing their own interests in the process. Alternatives outside of the process have also been mentioned. One option that both industry and aboriginal communities are now pursuing is to develop collaborative decision-making processes. Section 4 reviews these initiatives in detail.

SECTION 4: BUILDING RELATIONSHIPS

Introduction

Corporations in Alberta have given higher priority to building relationships with aboriginal communities. Perhaps they pursue relationships because collaboration can lead to long-standing agreements, or in recognition of the increasing power of aboriginal groups in Canadian politics, or because they have been forced to by public pressure (boycotts, roadblocks). Whatever the reason, in my discussions with corporations, it is apparent that this issue is currently being paid much attention.

Interviews with Bob Blair, (former C.E.O. of Nova Inc.), with Suncor, Syncrude and Amoco have revealed a number of different strategies for communicating risks in a cross-cultural context and for resolving disputes when they arise. Although there are similarities in what companies do to develop relationships (e.g., Memoranda of Understanding), there are also widely varying approaches. Hence, I have compiled the results of these interviews and pulled the strategies and recommendations together. In this chapter, I will review what a few of the major corporations involved in energy resource extraction are doing in Alberta in order to develop and maintain productive relationships with aboriginal groups in areas in which they work.

Why collaborate?

Although aboriginal groups and specialists were somewhat cynical about a corporation's motivations for approaching a community directly, some were more optimistic about a community's ability to meet its own goals through collaborative processes, rather than through an adversarial, third-party decision-making process. One reason for this, is that communities emerge from the public hearings process with a decision, but rarely with guarantees of employment for aboriginals or community monitoring of the corporation.

> The public hearings are an expense to the company, but now that expense has paid off - because now they've met the requirements for the public process and any of the recommendations made by the public were not listened to - so now not only is there no monitoring, there's no standards by which the company has to operate by. So basically ... it's a license to go out and literally destroy that environment. [2]

After a frustrating experience in the Alberta-Pacific environmental review, one source has spent much time developing a model for community needs assessments and participation in the energy resource industry. He states:

> If industry would just listen, things would go really quick for them. It would be really interesting ... if they implemented something [a community mobilization model], they would get the buy in from a lot of people. [2]

From a community's perspective, they may be able to guarantee themselves many more opportunities (employment, monitoring the corporation, untouchable areas) if they spend more time negotiating agreements privately with industry. Of course, many doubt that industry meets with communities for anything more than creating a positive public image.

In spite of this stereotype of industry, corporate sources discussed some of their motivations for developing relationships.

> There's two reasons for having a relationship. One is that it does make your life easier from a business standpoint. But the other is that there is a higher reason to have a relationship with these people, in that they are a local resource to you. And if you can develop them as a local source of people to employ ... then you have a local thing there. And it is a good thing to do from a business standpoint. [5]

> There have been individual projects where we have either been very near to native land, or we have been on reserve land, and it very quickly focuses your attention to develop a relationship. [8]

Many of these companies have learned from past experience that ongoing dialogue, though time consuming, may avert future problems.

> I mean we have maps that show us every trapline, everywhere. Simply because we know it is important. And we still can't assume that because there is no trapline showing, that there isn't one there. And we found that out the hard way. It was a real technical thing - you can go through and look at all the traplines. Well, somebody's trapline wasn't marked there. And it just happened to be the Chief of one of the bands. And we had a huge problem. Kind of a breakdown, because the feeling was that we had lost trust .... Other than just looking at a map that the government gave us - we could have gone out to that community sooner and said, we don't think there is anything out there, but is there? [8]

However, it is clear that aboriginal communities will no longer accept only consultation with industry. Pressure is on companies to allow aboriginals to participate and monitor their industrial activities.

> All I want is - you just train me and employ me to make sure that whatever it is you're doing on our land is safe and you're following certain standards and we're monitoring

> you. We're out there from early in the morning till late at night, making sure that nothing happens with your operation on our land. [2]

Realities of collaborative relationships

Aboriginal groups and corporations face a number of challenges when they start to develop collaborative relationships. There is often no history of working together or negotiating a relationship, and there may be a legacy of distrust towards industry in general (particularly in the Lubicon case). There is also no traditional or legislative framework encouraging collaborative decision-making.

Another reality that must be addressed is the divergent structures of the groups involved. While corporations tend to be hierarchical with a capability to make quick decisions, aboriginal groups are differently organized, and may take more time to reach a decision based on consensus on issues. Also, there will be differing abilities within groups to ratify, endorse or commit to a proposition. Individuals who negotiate with a corporation are generally responsible to an entire group of people. If the leaders do not report back to their community, or are pushed to make decisions too quickly, they may end up losing the support of their community.

Corporations and aboriginal groups will both need to be aware that there are likely to be underlying issues of principle that may arise in discussions. In these cases, these principles must be respected. In cases where third parties make the decisions, the third party can often unwittingly violate these principles because they have not been made explicit in the decision-making process. In discussions between aboriginals and corporations, these issues may come out more naturally and, as a result, be respected.

For some, intervention and participation in environmental decision-making structures will be a job, while for others it will be a cause, based on belief in some principle. This issue needs to be addressed at some point in negotiations.

> So if you want to engage them, if you think there is value in having them engaged in consultation, then you have to be able to support it financially. It took me a while to cross that bridge frankly, because, you know, this is supposed to be for their benefit too. [5]

> You have to fund them through the consultation process too. It took me a while to get my head around funding people to come and have meetings with me. But eventually

> we came around; we truly want them there, providing meaningful input. We are going to have to provide funding to get that. [5]

Any corporation who has been involved in developing a relationship admits that it takes time. Implementation of decisions or agreements may require many years. Informants see this time as well spent, because they link this investment of time to achieving less conflict and more effective decisions.[10]

Advantages of collaborative strategies

There are a number of advantages to negotiating a relationship. For both aboriginal groups and corporations, defensive decision-making may be avoided (the classic situation of decide-announce-defend). Public groups are often jaded by their experiences with industry. They feel that consultation is just one more check mark on the list of things to do before the project is up and running (2).

> And before industry even comes to the government for regulations, everything is already planned like this, a book like that, a proposal. That's what the environmental impact assessment folks do, they submitted a proposal, but even before they submitted a proposal, they had all this planned out. [2]

If those who are directly affected are involved in the decision-making (not just in a token fashion), then agreements may result in more timely and accepted decisions. Decisions will be made and implemented at the local level, rather than simply made at the political level. Also, closure can be achieved on issues, something which has not been achieved with Unocal and the Lubicon Cree, because tensions still run high between the two groups.

How are relationships established?

There is no quick and easy way to establish a relationship with an aboriginal community. One certainty is that a sincere desire to engage in relations and respect are essential ingredients. "Fair, patient, respectful dealings", was Bob Blair's advice. But, there are many levels at which change must occur. These areas relate to the internal machinations of a corporation, employment, establishing a relationship and an internal cultural shift on the part of industry.

---

[10] See Appendix 6 for an example of aboriginal policy. Published with the permission of Amoco Canada.

Inside the corporation

Many of the sources indicated the first push to establish ties with aboriginal communities came through a commitment by senior management (5, 8).

> I would say that the biggest event was a change in management about four years ago, about there. New attitudes. It's probably at the top. So you have had new attitudes come in, from the top. [5]

Once commitments were made by senior management, many companies set about creating aboriginal policy.

> We need [internal policy on aboriginal affairs] because we need some sort of agreement internally in our management structure that this is important. So that is what the policy does, it is our own internal document that say, this is what we believe, this is what is important to us, and this is what we will do. So there is a couple of things in that policy. Number one is that we value having a relationship with the aboriginal communities, because they can be a local resource to us. [5]

> Basically, as of October 17, we have had an aboriginal policy, which was nothing more than a beginning of some guidelines which we then had to implement. We have been on that implementation phase ever since. Because as that thing indicates it is there to have some terms of reference for things that we want to do better, for some relationships that we want to build, and there weren't opportunities there a lot, because we are not sure of where we can go and how quickly we can get there - in terms of very specific and absolute things. We were very careful not to impose discrete targets and objectives so much as the basis for building relationships. [8]

With these policies established, many of the corporations set out to create internal committees and task forces. Committees in the companies concern such issues as employment, co-management or reclamation.

> Fort McKay is at the table, and able to comment and react to anything that is going on there. And it is kind of frightening at first ... because it is literally the group that makes the decisions, and in order to do that - you have to display the pros and cons of any action. The costs, risks - all that. Fort McKay, through that bureaucracy, has access to all that. We have the bison project on our side too, which we're doing research into - the capability of reclaimed land to support large ungulates. There is a steering committee for the Bison project, and Fort McKay is a co-partner in that project. [11]

Some corporations indicated that change witnessed in the past years was dependent also on the personal commitments of a few people.

> But the thing that has really made the difference is that there are probably about three dozen people in the company who have decided to make it work on a personal level. You can write all the policies and say all the things you want about what this company's attitude should be towards aboriginal relationships, but people can always

> find as many reasons to make it not work ... And my personal experience has been that there are about, in the last two or three years, there are about three dozen people in this company, who, by the nature of their work and where they are doing work, they have decided that it is important personally to advance that cause. [8]

Once corporations have made the internal commitment to developing relationships with aboriginal communities, an obvious level at which they can make changes is in employment.

Employment

Although companies are downsizing these days, most participants have recognized that establishing a relationship involves integration.

> There will never be understanding, so long as the native community, which is often sizeable in an area, is effectively frozen out of meaningful employment in the companies that are operating in the area. Now there will always be suspicion and resentment, so long as it appears that native people need not apply. Which has frequently been the case in the past. Companies have said that they couldn't find any qualified natives. Natives have known that if they approach that particular company that they wouldn't find any understanding, they would find excuses to not ... take natives on. [7]

Employment equity may be achieved through job training, job shadowing, education or mentoring, co-op programs and scholarships. Many companies are contracting outside services to local aboriginal contractors. Others have targeted different positions in the corporation such as accounting or engineering, generally areas that aboriginals have not yet penetrated. Bob Blair provides a wider view of how employment should be treated.

> People just naturally gravitate to a place where they see that people like them have had some success. And, they naturally stay away from places in which it is obvious, where nobody looks like them anywhere in sight. And so you have to gradually build up the trust and the confidence that can build up between the company the workforce. And I found that is not so much the things that happen on the job, but as it is the things that happen around the job: the sleeping accommodation, what happens in the restaurant, what happens with the kids at school, that sort of thing. It is very important, in that what kind of help you need to give is the social and domestic kind of advisory and helpful support, rather than, once they are on the job, things work out okay, on the premises. [7]

Industry / band relations

The first step in establishing a relationship is having "people who respect the native people as individuals in the first instance. And then, set them out there and give them the authority to talk reasonably" (7). One company has integrated the principle of respect into

agreements "it says here that our company and the Peigan agree to negotiate in good faith further agreements" (9).

In establishing relationships, both aboriginal and corporate individuals have identified a few important principles. All stress that agreements with communities must be negotiated from community to corporation (11).

> And then what it says is that we will develop specific agreements on a community by community basis. So we have gone out after the policy and started to develop those agreements. [5]

During negotiations, many emphasized that consistency in representatives is key to a solid relationship (7).

> You need some consistency of the representatives who are going to be doing it. Which is never easy, because we are turning people around, and they are having elections every two years. [8]

Informants emphasized that links have to be made at many different levels, such as bureaucratic, political and through employment. One company found that the community wanted people of equal status to meet.

> So the President makes time to talk to the Chief ... And the Chief of the band considers that an essential step. They don't continue and say that is the only guy they'll talk to ... We have to be sensitive to the community's' opinion of what is appropriate protocol. [11]

To acquire this knowledge of appropriate protocol, it is recommended that companies become aware of the community structure, politics and form of decision-making.

> I think that an industry that is really involved in an area, in terms of getting its natural resources from an area, or using the lands in the area for its main access and corridors, is well-advised to get itself thoroughly immersed there ... to be a bit selective about it, because you can't necessarily get that familiar an interest in every place in sight. But I think that where there is an important physical resource or material tie, that you should get to know the area very thoroughly indeed. And that involves getting to know the administrators and political leaders. [7]

Another source stresses the importance of understanding the context of the community.

> Until you have an appreciation of aboriginal culture and history, and some of the dynamics that are at play there, in terms of even their own political system, then you can't even begin to enter into a consultation that is needed. [8]

In reference to public hearings, many participants emphasized that there was no mechanism for establishing common ground and common understandings. In these kinds of collaborative

partnerships, substantial time is spent in achieving common understandings. Two different sources reinforced this idea:

> So, we spent a lot of time just getting down to a common language just so the native group understands the limits our role. [8]

> Where that really threw us for a loop, was just - they didn't invite us to sit down and talk about what words we were going to be using. People get an understanding about these six issues. What do you mean by water, soil, air... [2]

Achieving common understanding is not limited to the meaning of words and concepts. Political issues and issues critical to the community may be raised in negotiations. Though they may seem irrelevant to the company, they cannot be side-stepped.

> You spend more time raising issues that you finally understand, mutually understand that you aren't going to be able to resolve, than you do resolving the simple ones. So you are exploring all kinds of things, including, is Amoco prepared to recognize our treaty rights? Well, what does that mean? Is Amoco prepared to recognize that we are a nation? ... So we have to be very very careful that there is no interpretation by government, for instance, that we have somehow stepped out of our boundaries and we are making acknowledgements and commitments to things that we have no right to commit to. Because we have no place to write these laws or to interpret whether or not this is reserve land or traditional territory. [8]

Traditional knowledge

In the public hearings, many felt that local knowledge and community goals were marginalized. Some of the companies stress that it is critical to seek out this kind of information. There are a number of innovative ways of doing this.

> Through dialogue and research you better appreciate some of the hunting interests, the spiritual interests, the archaeological interests. And generally these agreements do refer to a commitment to do different studies. Both sometimes hiring the local people to do it, sometimes getting experts to do it. But they usually do include archaeological and historic studies to better determine what the traditions and areas of interest have been. As well as environmental studies, because they are obviously very concerned about impacts on watersheds and hunting and animal migration. And just good stewardship. Those have all been parts of it. And this is something that the average engineer or geologist probably wouldn't even have had in their vocabulary ten years ago. [8]

An innovative, long-term approach to integrating the community and collecting traditional knowledge is reported by one source.

> We sought the advice of the political staff in the community, and what we wound up doing is we hired a well-respected person in the community ... as an intermediary

> between the mine project and the community. He has already completed the first step - which is to go alone to talk to ... people defined as elders in that community. And he has talked to them individually in their own kitchens. The second step is for a person on our team, who has been selected by the community as a person that they are comfortable talking to - to join the first individual. And make another tour around - sitting with individuals in their homes, speaking for whatever length is required. For their comfort, and to get rapport established ... Out of all of that - our expectation is that there will be a clear understanding of the elder's perspectives and issues. The commitment that we have made to that - is that we .... want to have a community open house. But we have told the elders that we aren't going to have that open house. Our understanding is that they won't say it's okay until they are comfortable and had their say. [11]

> For example, there is some areas that are more sensitive than others, for example, if there is grave sites or any of the other areas, and in general we try and ... watch how close it is to some of the wildlife habitat and stuff, for example ... if there is moose, where they calf. And these are all areas that we try and look at any time that we meet with different companies as to where the location that they want to work. These are always the kinds of environmental concerns that we have in different areas, and also again, when we look at them how best do we .. how particular a company is trying and bring back the area of restoration. [ERCB 1994a: 1378]

These collaborative relationships may allow communities to maintain areas that are key to their cultural interests. However, corporations are not yet including traditional knowledge in their assessments of an area.

As a source of power, many aboriginal communities will gather traditional knowledge in an area, and then not release it to industry. Often, this is done because many fear that industry will take the information out of context, or use it in inappropriate ways. Most aboriginal communities have access to resources inside or outside of their community to gather traditional knowledge. What is usually short is funding, and most companies indicate that they are willing to pay for studies (5, 8, 11).

Achieving agreement on resource use requires time and an agreed upon process. One company's agreement with a community ensured that no one could take unilateral actions. Part of the agreement also focused on acceptable mechanisms for resolving disputes when they do arise.

> But there is no way that a company should ever be able to ultimately say, well all criticism aside, we're going to drill here. And no way that certain stakeholders should be able to have certain power over decisions either. You have to reach a process,

> either through a hearing, or some kind of arbitration / dispute mechanism. Or some huge public process that ultimately resolves it. [8]
>
> A lot of these agreements ... has some provision that should the parties not be able to resolve a certain issue, that you agree to some method of arbitration or dispute settlement. [8]

Each company interviewed used a combination of these principles in order to negotiate relationships with local aboriginal communities. Emphasis by a few of the participants was placed on another aspect: internal cultural education within the company.

Cultural shift on the part of industry

The Board professed interest in aboriginal culture and history. In the industry arena, there is interest in learning about aboriginal culture and history. Some companies want seminars that focus on general aspects of aboriginal culture. Companies with more experience also indicate that the company must be willing to change in order to develop a relationship. This model defines aboriginals as the problem, and not as equal participants who bring their own perspective to the table. Cross-cultural seminars focus on things like behaviour and aboriginal decision-making structures. Some indicated that cross-cultural training must involve consideration of their own biases and limitations (8).

> The first thing that I had to learn was incredible patience. Because my training suggests that we are there to get a job done, and the whole value system or business mindset of a company is - if we don't drill there - we call it reduced cycle time - we want to drill there as quickly as possible. We didn't do all that work to wait ten years to find out if there is gas there. We want to build a pipeline and we want to sell it. [8]
>
> We have been doing some cross-cultural awareness ... (through) a program that they call Indian 101. And it has been - more than anything, it has done two things. There's the basic history and cultural teaching that can move an .... employee a long way to overcome some of their preconceived ideas of what the issues are .... And the other part of it is you can break down some barriers by getting some of those people to express what their biases and stereotypes are. [8]

The focus is on industry considering their own biases and assumptions. In order to establish a relationship, industry has to be willing to change the way they operate.

Barriers to collaboration

Many individuals also stressed that there are some barriers that will be encountered in collaborative negotiations. Observation of aboriginal groups have led corporate sources to the following conclusions. Chiefs are political and represent a group of people. As they are political, there must be room for their political language and positions to be brought into the discussions. Also, because their position is political, the individual acting as Chief will change over time. The implication of this change may mean that issues key to the group will vary over time (e.g., safety, health). Communities' needs and worries are not static.

One corporation indicated that industry has to be careful about how much communities expect. Agreements need to be precise.

> Policies are harder than they look because so much is left to interpretation when this thing starts getting circulated and for every individual native community that holds this policy, they believe every thing on there pertains to them, and they get one of everything. So if you say that you are going to give a scholarship to the aboriginal, every one of the dozens of native bands that you are dealing with figure that they are going to get a scholarship. We learned very quickly and we went through some efforts to get some external feedback before we published it to make sure we understood what the expectations would be and the interpretation would be once we started this. [8]

Companies may also run up against fears outside of the aboriginal communities that reverse discrimination is occurring. These concerns may also arise within the corporation.

The future of cross-cultural disputes: Public or private?

It is not clear how these new collaborative enterprises will affect conflict and risk communication in Alberta. While the government downsizes, these kinds of initiatives are likely to become more important for management of energy resources and resolution of conflict. However, it may be problematic that these agreements are private, for as it has been noted, public airing of some positions is often necessary. These kinds of agreements may also need to involve more groups than aboriginals, such as environmentalists or municipal authorities, if valid specific interests warrant. Agreements of this kind are being developed in forestry as well, as is evidenced by Alberta-Pacific's Aboriginal Management Guide; this agreement is unique in that it contains a clause for trapper's compensation. Compensation can

come through employment, in kind, or in the form of money to compensate a hunter for their loss of livelihood, due to industrial development.

All of the corporations surveyed indicated that they were on the learning curve in this process. Many were realistic about the process of change in that they realized time is a necessary ingredient in change. Indicators of success that were mentioned were a decrease in conflict (7, 8) and invitations to participate in aboriginal community affairs and events.

CHAPTER VI: CROSS-CULTURAL COMMUNICATION AND DISPUTE RESOLUTION

Categories of risk communication and conflict that have emerged through the data analysis include: cultural and linguistic barriers to communication, the cultural gap between industry and aboriginal communities, conflict between groups, the effectiveness of the quasi-judicial process in resolving cross-cultural conflict, and alternative methods for resolving disputes. These issues can be best understood when set into a framework that accommodates differences, such as a cross-cultural model.

Risk communication that recognizes differences amongst groups can be more effective than existing processes. Although no coherent framework for a cross-cultural model has been established, two themes have emerged from this work. Many factors such as ethnicity, socio-economic status, educational background, language differences, and worldview affect communication between cultures. Second, the cultural context of a group of participants is shown to affect their ability to communicate and understand other groups.

The picture that results from this analysis is multi-faceted, but much more representative of the participant groups and thus a more realistic base for effective communication. The cultural context of decision-makers, industry and the community are outlined in this chapter. Decision-making styles, communication styles, power bases and biases are identified. By making these sources of difference and the cultural contexts of each group explicit, barriers to communication may be recognized. In this way, information may then be transmitted across the perceptual, linguistic and cultural divides that exist between groups. However, the recommendations from my work indicate that only changing the way communication occurs will be inadequate. Aboriginal participation in both corporations and the regulatory body has been identified as a key factor. Aboriginal and academic sources recommend that representation of the aboriginal perspective in the Board be established in energy resources disputes in aboriginal territory, and that aboriginal monitoring of corporations is critical.

The cross-cultural model can be drawn into the dispute resolution arena as well. Acknowledgement and understanding sources of conflict, and their relevance to each different group can aid in choosing a dispute resolution process. The Lubicon/Unocal dispute was rightly placed in the public hearing forum. However, this forum can be altered to more effectively include aboriginal perspectives. This dispute was about communication, land use and acceptability of environmental risk. Underlying the dispute were profoundly different cultural values for the land. It was not only a conflict about a limited good, but a negotiation over whose vision of land use will prevail.

My research has revealed that in some contexts, negotiation and collaborative processes provide a forum for diverse stakeholders to express their interests, needs, and concerns in a manner that can be implemented as public policy. They provide an organized structure that integrates environmental, cultural, political and economic elements in negotiated agreements in order to resolve complex development decisions. Such agreements, because they have the support of affected parties, have a better chance of being implemented, and creating environmental, cultural and economic gains.

In the following two sections, I will critically review the data against the backgrounds of the various positions and theories outlined in Chapter II. In the first section, risk communication between Unocal and the Lubicon is reviewed in light of the cross-cultural model. In the second section, the quasi-judicial process is reviewed and recommendations are made for making it more inclusive. The current trend towards collaborative decision-making between corporations and aboriginal communities is also reviewed.

SECTION 1: DISCUSSION OF RISK COMMUNICATION

Overview

The communication between the Lubicon and Unocal was a one-way transfer of information, that did not acknowledge either the local context or Lubicon culture. This communication process was ineffective because the goal of achieving informed consent of the Lubicon, was not obtained. The cross-cultural model is used in this case to outline differences amongst groups that may lead to conflict. Secondly, it is used to provide a historical and cultural context for understanding the role of industry, regulatory board, and the community (Salem 1995). If these differences and cultural contexts can be accommodated within a common process, cross-cultural risk discourse may be more effective. My work has established that all of these factors can affect risk communication. Participants in my research have made recommendations for accommodating these differences. These recommendations, in combination with those from the literature, are summarized.

Cross-cultural model

The theoretical underpinnings of the model used for this case study derive from social science work on risk communication and cross-cultural studies. Plough and Krimsky's (1990) model of cultural and technical rationality is useful insofar as it outlines the logic for both experts and the public. However, this distinction of expert and public is insufficient for this particular case study. It limits expertise to one group of participants. Also, this model does not acknowledge commonalties or key differences related to identity.

Vaughan and Nordemstam (1991) outline factors that can influence risk perception. These are ethnicity, access to social resources, gender, socio-economic status, general worldview, and educational level. Here, factors are identified, but they are not related to the process of risk communication or conflict resolution. No coherent framework has combined these factors with a process in order to elucidate these

relationships. From the disparate literature, I have identified two key premises for a cross-cultural model:

- factors such as ethnicity, socio-economic status, worldview, and educational level will affect the process of communication.
- There are more values and norms in common within a group than between groups. The values and norms of a group affect their ability to communicate effectively with other groups (Salem 1995).

In application to this case, I argue that these two principles must be overt and integrated into risk communication programs. If these factors are acknowledged, communication about risks can be more effective.

Factors affecting risk communication

The cross-cultural model of risk communication is useful because it reveals sources of difference between groups which may lead to miscommunication or conflict. Some of these differences are related to culture and may be born of ethnicity, gender, social or economic status, educational level, prior experiences of risks, or worldview differences (Vaughan and Seifert 1991: 31). For example, in sections I and II of the data, sources of difference between Unocal and the Lubicon which impeded cross-cultural risk communication related to: language differences, different perceptions of risk, communicative styles, context, worldview differences, socio-economic status and power differentials. The communication process was ineffective because of a lack of acknowledgement or awareness of these factors.

Language

Language differences contributed to the gap between Unocal and the Lubicon. Unocal's use of technical language which was inaccessible to the Lubicon in applications and conversations, excluded them from discussions and precluded their understanding of the nature of the sour gas plant expansion. Further complicating the communication problems, both Cree and English speakers were present at events. Usher et al. indicate that "translation and interpretation of even the most basic technical information and scientific concepts .... have so far been inadequate and even misleading" (1995: v). Thus,

literal translation of scientific concepts to Cree or vice versa may not be sufficient to ensure dialogue, if it is not accompanied by attempts to establish an understanding of the meaning of these concepts to the issue at hand.

Perceptions of the risk of the plant

Another factor that impeded communication was divergence in the perceptions toward the risk posed by the sour gas plant. According to the information transfer models, technocrats believe that if the risks are more effectively communicated, conflicts about risk management options would be easier to resolve. Unocal's communication conformed to this pattern, as employees referred to the gaps between the technical understanding and the Lubicon community's understanding. They assumed this gap could be closed if the community could achieve a better understanding of the technical information. The Lubicon did not have all the technical information and were not able to understand the implications of changes in plant processes. However, once they did have the information, they continued to reject the plant, confirming that lack of technical understanding was not the sole reason for rejection. Other possible explanations for the conflict and strategies for conflict resolution had to be examined.

This assumption indicates that Unocal did not effectively consider the cultural context of the Lubicon. Further, their attempts to communicate may have done more harm than good. Each time they failed to communicate appropriately, greater distrust and anger resulted. These communication strategies were ineffective because Unocal's representatives made assumptions about Lubicon needs without consulting the Lubicon.

Communicative styles

Cross-cultural communication may also be impeded through misunderstandings that are related to behaviour. During the hearings, Bishop discussed the meaning of eye contact, the flow of time, silence, and shyness in aboriginal communities. There was no comparative reference to the communicative styles of the western corporate culture. Some reflection on the norms of interactions of those from a Eurocentric background and how they are perceived by the Lubicon may create mutual acceptance of different

communicative styles and cultures. For example, traditional corporate culture values uninterrupted speech, continuous eye contact and no silences. Pauses in the corporate culture may be shorter than in Cree. Lack of eye contact is interpreted by some from the corporate culture as lack of confidence or even dishonesty. Each of these norms of interaction has a meaning associated with it. Reflecting on those meanings and awareness of the context of another group's style of communication can reduce misunderstandings.

Cultural context and education

Models of cross-cultural communication indicate that cultural context is a key component in designing risk communication and in understanding responses to risks. My research reinforces this. First, such factors as which form of media is used to convey information, and the extent of English literacy within the community will be key considerations in designing appropriate and effective communications. Related to this issue will be the varying educational levels within the community. Second, the community may assess a project in relation to other projects and incursions in the area. Although a given project may have minimal or limited effects, the community will evaluate it as part of all other existing and future projects. This was the case with the Lubicon, whose sense of cumulative effects was different from that of the corporation. They rejected what was a seemingly minor project because of their perception of the cumulative impact.

Worldview

Another factor that may contribute to miscommunication relates to worldview; different groups may have worldviews that are not mutually understood. For example, the Lubicon rely on country food for their diet. Country food has a cultural and spiritual significance to the community as well as nutritional value. Acquiring country food for Unocal employees may be a pastime like hunting or berry-picking; most of their food will be bought at supermarkets. As Usher suggests, "for most Canadians, the production and distribution of food is divorced from its consumption" (1995: 6). Aboriginal identity and the collective sense of well-being are based on subsistence activities as an integral part of their social system as well as being a dietary staple. Threats to the animal populations or

land base are seen as threats to community identity and societal stability (Usher et al. 1995). If corporations do not or cannot understand the difference in worldview, they will not be able to comprehend the nature of the risks that may be unacceptable to a community.

These perceptual differences were drawn out in the hearings. The Lubicon felt that the Board and industry valued money and economics over Lubicon health and lives. While industry wanted to process gas, the Lubicon saw that as antithetical to their desire to protect the land and continue to live in this area. The disparity in worldviews between Unocal and the Lubicon is apparent in the conflicting reports on wildlife. Unocal's wildlife counts did not mesh with the observations of aboriginal hunters and trappers in the area. Further, exclusion of information that people in the area had about wildlife health and numbers served to alienate them from the process. As a result, Unocal's scientists lost credibility with the Lubicon.

Socio-economic status

Differences in socio-economic status of the two groups present also had an effect on communication and conflict. Pursuing a gas plant application is part of Unocal's corporate responsibility. All staff and consultants have their expenses and salaries paid as a part of their job. For most aboriginal people and environmentalists, their participation is a voluntary activity where they are contributing their time and resources. As the source of intervenor funding was perceived by them to be inappropriate, the Lubicon did not apply for intervenor funding. Although it was inappropriate for the Lubicon, intervenor funding is an important feature of the quasi-judicial system which enables many intervenors to participate.

Power imbalances

Socio-economic differences are related to power imbalances. Formal power is held by the regulatory body. It makes binding decisions about energy resource development. Both the Board and the corporation also hold other forms of power, such as specialized knowledge. Members of the regulatory body are familiar with scientific

knowledge and regard it as a base for decision-making. Their unfamiliarity with traditional knowledge results in it being excluded from consideration in decision-making. Corporations generally create or invest in the information that will be used for decision-making. They may overwhelm the community with it and thereby intimidate them, or they may withhold information, as occurred in this case. This factor, along with the greater overlap between the values of Unocal and the EUB, contributes to greater power being held by the corporation. There should be equity between the proponent and the intervenors.

Cultural contexts of groups

A strength of the cross-cultural model of risk communication is that the cultural context of the groups involved is acknowledged and defined. Gamman shows that each group, whether it is a bureaucracy or a cultural group, possesses their own culture for decision-making (1995). For example, Ross identifies aboriginal Australian's process for resolving grievances (1995). Lund, Morris and LeBaron (1994) outline the culture-bound assumptions of the dominant dispute resolution model. The ramification of making these contexts overt is that aspects of processes that are designed to accommodate only one communicative style or structure of a group can be altered.

The model of technical and cultural rationality outlined by Plough and Krimsky (1990) establishes the context and logic of each cultural group. According to this model, there is a social context that establishes the credibility of expertise characterized by a common language and reliance on scientific principles. Both the Board and industry share this common language and basis. According to Plough and Krimsky's model, the public may evaluate risks on a broader basis, personalize risks, emphasize the impact of risks on family and community and focus on the local context (Plough and Krimsky 1990: 230). This analysis is parallel to my findings on the Lubicon. However, this dichotomy of expert and public masks the expertise that is available from aboriginal groups and does not acknowledge common ground between groups. Likewise it does not recognize diversity within each groups.

The value of a cross-cultural model lies in defining each group at the public hearings as different cultures, each containing its own internal logic. The importance of this lies in revealing the preferences, value assumptions and biases that characterize both industry and regulatory agencies. No group is apolitical or value-neutral. The current composition of the Board inhibits full understanding of the issues that aboriginals face. A Board source stated, "when we are dealing with farmers, we have a lot of staff who have grown up on the farm" (1). The Board has greater familiarity with issues that farmers face and has traditionally dealt satisfactorily with their concerns. There are few people in the Board with direct experience of northern and aboriginal living. Aboriginal and academic sources recommended inclusion of people on the Board who are sensitive to the concerns of aboriginal groups and are able to understand their land-use patterns. This is consistent with other administrative agencies in Canada, as is evidenced in a review of regulatory bodies:

> The composition of boards can, and often should, reflect all aspects of society. Members may include the experts who give advice on the technical nature of the operations to be considered by the board, as well as representatives of government and of the community. [Law Reform Commission of Canada 1985: 316]

The cross-cultural model of risk communication has served to highlight the differences between groups that may result in miscommunication or conflict if not addressed. It has also served to outline the cultural contexts of the groups present. In this case, age and gender were not identified as significant variables. However, in other cases, these factors may affect the attitudes and behaviour of particular individuals and groups. Gender differences may have a more subtle influence on the process of information transfer and dialogue. The band and corporate representatives are predominantly male, reflecting the gender-power pattern of both groups. Access to information about environmental risks or to decision-making power is not formally available for women. However, no conclusions are drawn on this subject, as it was not the focus of this work.

Recommendations

Recommendations from this research derive from corporate, aboriginal, academic and regulatory sources. Other suggested strategies are based on the transcripts of the

public hearings, where the Board staff cross-examined many knowledgeable intervenors. I have compiled these recommendations and combined them with results from other similar studies, such as the CARC (1995) study and the report prepared under the Arctic Environmental Strategy Northern Contaminants Program (Usher et al. 1995). Both of these reports on aboriginal responses to industrial development and contaminant episodes have direct relevance to the Alberta context. Recommendations fit into the following categories:

- changes in the process of communication;
- changes in preparation for public hearings;
- changes that industry needs to make; and
- increase in public participation and representation of aboriginals within decision-making bodies.

Cross-cultural communication requires innovative and flexible approaches. In this case, it is clear that better communication would likely not have resolved the dispute, because the Lubicon simply do not want a sour gas plant in the area. However, there are lessons that can be extracted from this case. Unocal failed to present all information in written form. It may be useful to present information in the local language, however a combination of written and oral information should be presented. Public presentations with experts seem to be of little use (Usher et al. 1995), and should be seen only as tools, and not as the method for establishing dialogue. Pamphlets and videos are more effective than reports, but interactive communication is the most effective vehicle (Usher et al. 1995). For example, radio-phone in programs may reach non-literate sectors of a community. A useful forum in Alberta may be *Windspeaker*, or other newspapers that are circulated within aboriginal communities. A dictionary of technical terms, translated into more accessible language is also recommended. Communication should be field tested before it is used. It is important to recognize that there is a broad spectrum of needs within communities (Usher et al. 1995). Some participants will want only to know that a project is safe, while others will want all the technical information. Cross-cultural mediators may help to ensure that communication is effective (Ross 1995).

Before public hearings, it may be useful to try to come to a common understanding on meanings of words and terminology which arise commonly in discussion of the

proposal. Some interviewees felt that people did not understand each other during hearings. Although they were using the same words, their meaning was different. Agreement on terms may facilitate resolution of disputes or at least aid in establishing common ground.

In the interviews with industry, many sources stated that they were interested in learning more about behavioural and spiritual aspects of aboriginal culture (i.e., attending sweatlodges, and learning about significant behaviour patterns). This approach is laudable as an indication of a desire to understand, but it must be recognized as only one step in cross-cultural risk communication. Many participants for this thesis tended to see culture as something that is easily accessible. Culture is not something that can be systematized and taught to members of corporations. Within each ethnic group there is considerable diversity. The objectification of culture is superficial, masking the complexity of an entire way of life. The definition of culture introduced at the beginning of this thesis reinforces this, for it relates to three levels of culture: behavioural, material, and ideational. Attention only to the behavioural aspects of culture does not acknowledge the complexity of the other two levels, the material and institutional and ideational.

However, the Board and some sources from industry requested information about appropriate procedures for contacting an aboriginal group. This kind of information would be beneficial in establishing future relationships. Issues that have been identified as key are: identifying the best representatives and leaders of the band; determining the credibility of representatives; protocol for approaching community contacts, and understanding the decision-making structure of a group. These issues need to be addressed in further studies.

Although many individuals for this thesis recognized that there was a clash of cultures and worldviews, they were uncertain about what to do about this issue. Training about another culture can result in informing and educating individuals about another group. Such training must be carefully designed such that it does not result in generalizations, but rather in cross-cultural understanding. Unocal relied on a stereotype of aboriginal culture, which led to the assumption that the Lubicon would not want all the

technical documentation of the plant. This generalized image undermined the communication process.

If the cross-cultural model is integrated into practice, the cultural context of each group should be articulated. Cross-cultural training must reflect the contexts of industry, the regulatory board and aboriginal groups. It cannot only be directed at aboriginal culture, but must also reflect on the common norms, behaviours and institutions of the Board and of industry. Informants stated that change and effective communication require a shift on the part of industry. Corporations need to be more flexible and respectful towards aboriginal groups. They must reflect on their own stereotypes and relearn their own histories. They must also be aware of their own assumptions, become more flexible in their time schedules, and accommodate the priorities and approaches of other groups.

Finally, suggestions were made that aboriginal representation in decision-making bodies is critical. Many individuals stated that the perspective of aboriginal communities cannot be represented by the current Board. They recommend direct representation of people familiar with an aboriginal perspective. However, it must be noted that there is great diversity amongst aboriginal groups in Alberta and that one person cannot represent all groups. Consequently, aboriginal representation should be achieved on a case by case basis, where an appropriate aboriginal individual acceptable to the affected community and to the Board can be involved.

Cross-cultural models that account for ethnicity, socio-economic status, education and other factors may help risk communicators to identify appropriate ways to communicate with aboriginal communities. They may identify differences that cannot be resolved through present patterns of risk communication. If these areas are identified, dispute resolution processes may be designed to accommodate these fundamental disagreements.

Successful resolutions of risk management processes are not guaranteed through application of the cross-cultural model of risk communication. The cultural factors that are outlined through this research reveal some of the barriers to cross-cultural communication. However, disputes will still arise, as there may be a lack of intent to

communicate or simply fundamentally different goals. Cultural differences must be respected to avoid additional and avoidable complications to the dispute.

SECTION 2: DISPUTE RESOLUTION

Overview

Risk communication did not resolve the differences between the Lubicon Cree and Unocal. The problem could not be reduced to simple miscommunication or withholding of technical information. Beneath the issue of miscommunication and those of environmental and human health, are differing cultural values. This dispute concerned power imbalances and value-based conflicts. Underlying this conflict was a dispute about rights to the land and development, and this dispute may well-have been best place in the Board's hearing room. However, understanding the sources of conflict in this case may lead to avoidance of future conflict. The sources of conflict in this case relate to differing cultural values. This research has aimed to identify how these cultural differences can be effectively recognized and managed in order to achieve long-standing and effective agreements.

I will review the sources of conflict that led to this dispute. This conflict can only be explained with reference to the history of the Lubicon and Unocal. Their goals and values for the area are relevant, as are their cultural contexts. A review of these goals reveals that this conflict concerned basic rights and values. The specific conflict needed adjudication by the EUB, and likely could not have been managed through a more informal process such as mediation, as the distrust is deeply rooted. However, the quasi-judicial process is not free of problems when it is applied to cross-cultural conflicts. Many of the recommendations for change from participants could be made without significantly altering the structure of the EUB; others would require changes that may not lie within the Board's jurisdiction.

Informal dispute resolution processes have been pursued by corporations and aboriginal communities in Alberta. These directions are promising in that they provide new channels for dealing with disputes, which may resolve conflict before it demands the intervention of a quasi-judicial process.

Other forums for this dispute

The parties in this dispute were already polarized by the time of the public hearings. Are there ways in which these two groups might have moved from the adversarial frame to a reflexive frame? Could they, as Rothman (1995) proposes, have shifted from who wants what? to, why who wants what? Might they have found common cultural concerns and negotiated co-operative solutions? The likelihood in this case is that they could not have reached this point.

It is questionable whether there could have been any other process used for resolving the dispute. Unocal had not established a relationship with the community, and the Lubicon demanded public hearings. It was stated that "communication and co-operation based on mutual respect is our preference in dealing with people who wish to operate in our unceded traditional territory while we continue trying to resolve our long-standing jurisdictional dispute with the Government of Canada. People who try to outsmart, outmanoeuvre or mousetrap us into things which we believe to be profoundly contrary to our interests as a people force us to fight them as well as the government" (Ominayak 1994: Sept. 27). By the time the hearings occurred, each side was set in their position. There was no mechanism or room for the Board to probe beneath these set positions to the underlying reasons for disagreement. There was no easy way to establish common ground between Unocal and the Lubicon. Nor would it have been appropriate to try.

Sources of conflict

A dispute can be characterized by the public statements that are made by groups. However, this public face will not necessarily comprise the underlying reasons for the dispute. Publicly, the Lubicon rejected the plant on the basis of public safety, health, environmental effects, effects on wildlife and adverse social consequences. Yet, there were private agendas and motivations on all sides of the dispute. Some suspected the Lubicon of using the plant hearings as leverage for publicity for their land claim. It would be naive for anyone to believe that outcomes and actions at one negotiating table (or at the public hearings) did not have an effect on another. Unocal too, has a public face and

agenda, with many private and informal issues that they pursue. The hearings succeeded in bringing out the public positions, but were less successful in drawing out the participants goals, values and motivations.

The political and economic history of a band in negotiations will be relevant to any process for dispute resolution. For example, the Lubicon are a highly mobilized community that has been working for decades to achieve a resolution to their land claims. Lately, political divisions amongst the community have occurred, as members have fissioned to the Woodland Cree and Loon Lake Cree. These issues cannot be neglected when a company is working in an unresolved land claims area. Even if the land is under provincial jurisdiction, if it is neighbouring a claim, the relationship between the claimant community and the corporation is critical.

At the bottom of this dispute are profoundly differing cultural values for the land. The values underlying Unocal's operation are straightforward. Unocal desired a strong return on investment, which included the operations, and fiduciary responsibility to the shareholders. Alternatively, in the words of Chief Ominayak, "the Lubicon people are not prepared to allow Unocal to operate a sour gas processing plant across the road from the area where our people have lived for countless generations and where we've been seeking to have a reserve established for over 50 years. If Unocal keeps trying to shove this unacceptable sour gas processing plant down our throats we will fight you with all the means at our disposal" (Ominayak 1994: Sept. 27). The values that the Lubicon hold for this land relate to their culture, spiritual and social well-being which has been galvanized by their frustrating struggles with governments to resolve their land claims. In this case, the two groups were set against each other and the conflict seemed incommensurable.

Understanding the underlying reasons for disputes is a prerequisite for the effective implementation of a more participatory and democratic approach to risk management (Stern 1991), and for promoting a dialogue between various interest groups. Social conflicts about the management of environmental risks are influenced to a large extent by varying belief and value systems that lead to fundamental differences in the way in which individuals approach or structure policy problems. A successful resolution of many

controversies will require strategies that acknowledge, reflect and accommodate the variability within society in those beliefs and values (Vaughan and Seifert 1991).

Quasi-judicial reviews

Informants have affirmed the importance of the quasi-judicial process for resolving disputes, especially in cases where communities need to publicly represent their concerns. But, these public hearings polarized Unocal and the Lubicon through such processes as cross-examination. The debates over jurisdiction had a similar affect. Members of the Board indicated that there are practical limits to future procedural changes. The Board is a 'creature of statute', which needs to verify and substantiate statements. However, aboriginal sources indicated that without substantial change, they do not believe that the Board can make fair decisions.

The quasi-judicial system, some suggested, contains culturally inappropriate elements. Some members of the Board felt that the formality of quasi-judicial forums intimidates people. Others felt that the formality was appropriate, and that less formality might mask over the conflict and differences. The Board felt that steps had been made to integrate aboriginal styles of communication. For example, translators are available, and differences in delivery of evidence are accommodated.

Misrepresentations

The positions currently held by Unocal and the Lubicon are akin to those held in the hearings. The Lubicon claim that Unocal misrepresented the facts and Unocal maintains that they told the truth. As stated at the beginning of this thesis, neither I, nor the Board, have special powers for verifying the truth of claims. If misrepresentations are made, there is no recourse or punishment. However, on a related issue, if the EUB is dedicated to determining the "truth" of technical issues, they should seriously consider the merits of swearing witnesses appearing before the Board. While honest scientific disagreement is inevitable, swearing witnesses will go a long way to ensuring the veracity of the information presented. This could have the unfortunate side effect of adding to the difficulty in dealing with the legitimacy of traditional knowledge, but the need to resolve

this issue is further justification for including an aboriginal Board member in cases involving substantial aboriginal interests.

Jurisdiction over the land

The historical legacy of interaction between the groups is relevant to the process of public hearings and negotiations. At the hearings, the histories of Unocal and the Lubicon were argued over, corrected and revised in attempts to gain credibility with the Board or simply to try to present an alternative point of view. Unocal's international profile and their failure to maintain relations with the Lubicon were discussed. The profile of Unocal as a California based company was used to imply that the company was a foreigner to Alberta.

In response, land claims and the Lubicon's identification as a nation were put on trial by Unocal's lawyer during the hearing. In this case, Unocal's lawyer attacked the Lubicon history (legal status of the Lubicon and their land claims) by producing a report that was inflammatory. This move alientated and angered the Lubicon. They felt that such implications and discussions (discussion of their membership and Treaty negotiations) were out of context in an energy resource dispute.

The EUB took the position that "it has the full authority to deal with the application" (ERCB 1995b: 14). This jurisdiction was affirmed at the outset of the hearings by the Chairman, Frank Mink: "the purposes of the legislation and specifically Section 2.1 of the ERCB Act confirms the Board's jurisdiction to have regard for, among other things, the social and economic effects of a project or facility on the environment" (ERCB 1994a: 20). The Lubicon strategy of not recognizing the EUB jurisdiction over the land, but at the same time of attending the hearings, essentially invited the Unocal response about the validity of the jurisdictional claim. If the EUB recognizes that it cannot resolve such issues which are outside its jurisdiction, it should advise both parties that it will not entertain evidence on these issues. If either party chooses to ignore the Board's instructions on this matter, the Board has the option of allowing the opposing parties to engage in the same issue, but this direction seems to be counter productive to the Board's mandate.

This begs the question of whether land claims can be excised from any issue before the panel which involves disputed claims of ownership to property. Although the panel does not have jurisdiction, questions of ownership issues are relevant and it may be extremely damaging to attempt to separate these issues.

By the same token, in the event that the Board does clearly state at the outset its intention to exclude land claims issues from its jurisdiction, then it behoves the Board to follow through and ensure that the land claims issue is not used as either a sword or a shield by either of the parties. If the Board decides that an issue is not within its jurisdiction, but nevertheless allows that issue to be raised during a hearings process, the Board is in effect providing a political platform for one or more of the parties, on an issue which will not be resolved by the Board. This tends to diminish the position of the Board.

Cross-examination

Cross-examination was the most controversial aspect of the quasi-judicial process. Many affirmed the necessity of a process for testing the veracity of evidence, but made suggestions for change in cross-cultural contexts. The Unocal lawyer relied on questioning the personal integrity of the Chief. The Board and aboriginal sources recognized that this practice was culturally offensive, served to alienate the Band, and did not result in drawing out the 'truth'. People failed to see the relevance of topics introduced during cross-examination to the energy resource dispute.

Cross-examination derives from the judicial system:

> Cross-examination and confrontation are central to the adversary system but they are not merely talismanic rituals. Nor are they solely a means of putting questions and getting answers. They are devices for letting the jury see how the witness reacts, to assess whether they want to believe him. [Tigar 1993: 155]

The purpose of cross-examination is to destroy the adversary's credibility, to attack the foundation or conclusions of the witness by demonstrating lack of qualification or knowledge, to elicit damaging information, or to impeach the witness (Warshafsky 1992: 91). These means are not always suited to the quasi-judicial forum particularly given the absence of sworn testimony. The use of these techniques can alienate and marginalize the traditional knowledge of aboriginal witnesses.

If cross-examination is to be altered then questions of the credibility of a witness must be addressed. Snider and Yates' examination of administrative tribunals establishes that an important "rationale for establishing the National Energy Board was to provide a body of members who were appointed for their expert knowledge to adjudicate on energy policy in a way which could achieve administrative efficiency" (Snider and Yates 1995: 311). They examine the use of information and specialized knowledge within the setting of administrative tribunals, specifically the knowledge that can be relied on by regulators. They refer to the following kinds of knowledge: agency expertise, prior experience and associations, and specialized knowledge, and information generated by tribunal staff. These kinds of criteria could be used to assess the credibility of information that an individual brings to a forum.

Cross-examination practices and questioning should be altered such that elders and Chiefs are not asked questions that attack their authority or credibility. The Board may need to exert greater control over cross-examination to ensure that cultural intimidation cannot occur. Protocol can also be agreed upon in pre-hearing meetings as to how to deal with disagreements on the facts, or on how to get at the truth. Less formality in this forum might not be appropriate, especially in an adversarial and heated conflict. This reinforces the need for individuals familiar with the aboriginal perspective on the decision-making panel. This person could negotiate the rules of cross-examination, and relevant and appropriate questions with the intervenors.

Representation

Many participants feel that major structural changes are needed to make public hearings more effective. Many aboriginals and academics indicate that decision-making concerning lands that are key to a culture must include aboriginals. Asch recommends that decision-making is altered so that aboriginals are on the Board and are not just token players who can be outvoted by a simple majority. He recommends a consensus process, which will ensure that the aboriginal perspective is included. These panels are required only for cases involving sacred sites, burial grounds, traditional territory or other areas key

to the interests of the group. Recommendations for change include instituting elders panels, ad hoc panels, and making decisions by consensus.

Negotiating relationships

Although the conflict between Unocal and the Lubicon, in the short term, may not have been resolved through a consensus process, other cross-cultural disputes may be more appropriately managed through other channels. Some corporations in Alberta have given heightened priority to building relationships with aboriginal communities. These established relationships allow corporations and communities to negotiate a common language. These initiatives follow many of the guidelines of Susskind and Cruikshank's (1987) conditions for consensus approaches: they are ad hoc, informal, face-to-face and supplementary to existing structures. Through extensive negotiations, agreements on employment, education, cross-cultural awareness, aboriginal business development, community involvement and public consultation have been effected.

Relationships between corporations and aboriginal groups are worthwhile for a number of reasons. Communities can be local resources for a company, and through consultation a corporation can ensure that they will not work in an area that is critical to a group. From the perspective of an aboriginal group, through collaboration, they can gain employment, and watchdog status. These collaborative opportunities provide greater options and more constructive outcomes than do public hearings.

Issues that are addressed before collaboration is achieved relate to funding, timing, language and mechanisms for dealing with conflict. If groups are funded to participate in collaboration (as individuals from a corporation are), there is a greater likelihood of participation. Relationships may take years to establish, and may need to be conducted at times on the group's terms (in their language, or in their traditional territory). Not all issues can be agreed upon, and thus many collaborative relationships have developed mutually agreed upon dispute resolution procedures. While mediation and negotiation may work for some groups, many aboriginal and academic sources did not feel that these options provided a strong enough legal basis for those communities that traditionally have fewer resources and less access to power.

Achieving improved relationships have required many internal changes from corporations. New policy and commitments from senior management have been key. Employment and education opportunities have been identified. There are still many barriers to collaborations, one of which is overly high expectations on the part of communities.

These initiatives require a number of changes in the ways in which corporations work within communities. For example, consistency in representatives from the corporation is key. So too is following appropriate protocol for addressing a community, such as meetings between people of equal status, such as the Chief Executive Officer and the Chief of a band. Corporations have also made commitments to fund studies, especially the collection of traditional knowledge.

The lessons gained through applying cross-cultural models of dispute resolution have been adopted by some corporations. For example, some of them have taken it upon themselves to try to understand their own biases and stereotypes towards aboriginals. They have also shifted their time frames to accommodate aboriginal styles of decision-making. Others have adjusted the process of negotiations to accommodate aboriginal communication styles. However, these kinds of changes can be perceived to be token and artificial if they are not accompanied by financial support for aboriginal business ventures, meaningful employment and support, and ultimately empowerment.

Directions for dispute resolution in Alberta

As the conclusions from the CARC review of mining in the NWT indicate, sustainable development "is possible only when partnerships are created to co-operate on designing and building the future. If mining is to contribute to sustainable futures in the North, one of the most important challenges will be building effective partnerships that respect diverse cultural, social and economic traditions" (CARC 1995: 8).

The field of dispute resolution has not integrated cross-cultural models into practice and theory. Nonetheless, this work indicates that the cultural frameworks of disputing parties need to be overt. The history of the corporation and the community must be recognized as factors that will influence trust and negotiations. These factors, as

well as socio-economic status, need to be taken into account when a dispute occurs. If these underlying issues are not acknowledged, it is unlikely that the dispute will be resolved.

Further, concentration on the forum of public hearings indicates that there are changes that could be made to cross-examination and to the pre-hearing process. These changes can reduce the potential for conflict between groups by acknowledging linguistic, cultural and perceptual differences. However, distrust towards the EUB may continue because aboriginals do not have access to decision-making power in land use decisions that affect them. Many of them feel that the values and needs of industry are well-represented by the Board, as many of them are closer in values and worldview to industry than to the Lubicon. Until the aboriginal perspective achieves direct representation within decision-making bodies, aboriginal and academic sources agree that decisions that are made will not represent the perspective of aboriginals.

Informal negotiations and collaborative relationships are inclusive of the complexity of the needs of industry and communities. These relationships require changes from both the corporation and aboriginals, but are linked to a decrease in conflict. They are also linked to an increase in satisfaction from both sides, for as the company obtains contractors and a labour pool, aboriginal groups ensure that important areas are protected and that other community needs are met.

CHAPTER VII: CONCLUSIONS

The purpose of this study was to examine themes related to cross-cultural communication and dispute resolution. A case study approach and qualitative research methods were employed to review a conflict between the Lubicon Cree Nation and Unocal Canada. The intent of the research has been to apply models from cross-cultural risk communication and dispute resolution to the problems encountered by the regulatory Board, the corporation and the Lubicon. Through the case study, perceptual, linguistic and cultural differences were identified and recommendations for accommodating them were made. However, this case posed a particular problem as accusations of lying were made against Unocal. However, this research has aimed to identify how cultural differences and similarities can be effectively recognized and managed in order to achieve long-standing and effective agreements. This research has expanded to include other cases and a wider pool of participants. This chapter will review the major conclusions from this research.

Sources of difference that can lead to miscommunication or conflict have emerged through this case study. These are language differences, variations in perceptions of risks, communicative styles, contexts, worldview differences, socio-economic status, and power differentials. Communication in this case was ineffective because these factors were not adequately acknowledged. Other factors, such as withholding of information and reluctance to communicate increased the conflict between Unocal and the Lubicon. However, at the bottom of this dispute are profoundly different cultural values for the land.

Risk communication that acknowledges these differences will be more effective, but will not guarantee harmony. In this case, the dispute between Unocal and the Lubicon was directed to a quasi-judicial forum, which this study concludes was the appropriate decision. However, in cross-cultural contexts, this type of forum is problematic in a number of ways. For example, cross-examination procedures alienated members of the Lubicon community. This research indicates that informal procedures for dispute

resolution can be more inclusive of the complexity of disparate values and approaches to land.

This study has shown that cultural factors affect both risk communication and dispute resolution. Many conflicts over land use are complicated because they are not just negotiations over a limited good, but also manifestations of conflict between different value systems. Conflicts that directly challenge a group's core beliefs about nature, in opposition to the core values of another group, are likely to be particularly difficult to manage constructively. Cross-cultural communication should encompass many differences among groups such as language, socio-economic status, educational level, extent of literacy in the group, and the cultural contexts of the groups.

Indigenous communities often place non-economic values on resources that are tied to traditional belief systems involving religious rituals, sacred sites, historic sites, and historic hunting and gathering areas. When large-scale environmental negotiations are conducted these concerns are often ignored or unrecognized, threatening the survival of local communities and destabilizing any negotiated outcome that excludes these parties. In addition, ignoring or undervaluing the importance of culture in environmental negotiations can lead to policies and projects that are much more difficult to implement.

My research shows that in conflicts about core cultural values the currently constituted adversarial system is inadequate. However, expansion of the current system is preferable to replacement. The current system has the procedures and processes in place to resolve conflict. Less formality in this forum might not be appropriate, especially in an adversarial and heated conflict. Such a change would be superficial, and might mask the conflict and differences. The system polarized the Lubicon and Unocal, particularly through strategies such as cross-examination adopted from the judicial system. Cross-examination and questioning should be altered such that Elders and Chiefs are not asked questions that attack their authority or credibility in their community roles. However, if the Board is dedicated to determining the truth of technical issues, they should consider the merits of swearing expert witnesses to place a greater onus of accountability on those who would claim expertise before the Board.

Many aboriginals and academics indicate that decisions about land that are key to aboriginal culture must include aboriginals formally within the structure of the decision-making process, in this case within the panel of the EUB Board. The Board has familiarity with the issues of farmers and industry and is able to represent and understand their points of view because of shared experience and cultural values. The Board's unfamiliarity with the issues of aboriginal culture was evident; Board staff sought more information about the decision-making processes and appropriate channels for approaching aboriginal groups. The cultural differences between the Board and aboriginal groups can be bridged through inclusion of people familiar with aboriginal issues. Aboriginal and academic recommendations included instituting ad hoc panels for cases involving sacred sites, burial grounds, traditional territory or other areas key to the interests of the group. These panels should be run by consensus.

There is a special responsibility in Canada to include the perspectives and voices of First Nations in our decision-making bodies. Since the inception of the federal and provincial governments, aboriginals have rarely been consulted or represented. As they are the First Nations and we have acknowledged their rights through the 1982 *Constitution Act* as distinct from those of such groups as immigrants, there is a responsibility to provide for their representation in such bodies as the Energy Utilities Board.

Non-adversarial approaches are more effective in meeting a variety of needs of the corporation and the community. The initiatives between aboriginal communities and corporations which relate to employment, education, cross-cultural awareness, aboriginal business development, community development, public consultation and land use are promising. These negotiations need to recognize all core issues and values, and as Ross recommends (1995), should never require aboriginal cultures to abrogate their custodial responsibilities for an area. Funding, timing, language and mechanisms for resolving conflict all need to be negotiated. The collaborative opportunity provides more options and outcomes for both parties than do public hearings. Through these partnerships, aboriginal groups attain funding to conduct traditional knowledge studies which then can be used in planning.

A danger in the current trend towards cross-cultural training is that 'culture' may become reified. Culture is often seen as a curiosity. Although corporations and regulatory bodies have expressed interest in learning about the culture of aboriginals, learning about another group is only one step in achieving successful conflict management in cross-cultural contexts. However, if it is seen as the only need to be filled, it is likely that aboriginal frustration will increase.

QUALIFICATIONS OF RESEARCH

There are several qualifications that influence and/or limit the range of my data. The group identity of the participants took precedence over individual idiosyncrasies. There is internal disagreement within each group. While this is useful for outlining the positions taken during the course of this conflict, and has been useful for determining the differences that affected risk communication and conflict resolution, there are limitations in this approach. There is a danger in assuming that group culture somehow predetermines or dictates individual positions on particular issues. The group approach must be complemented by an individual approach. Further research may identify what factors lead to diverse opinions and actions within a group regarding a risk. Such factors are related to individual background, behavioural patterns, participation in sub-cultures, socio-economic status of different individuals and political factors.

It should be acknowledged that my personal characteristics may have had an unmeasurable influence on this research: I am a white, middle-class female who looks younger than my twenty five years.

Another factor that was a limitation on this research was Unocal's refusal to participate. This limiting factor, however, turned out to be a benefit to this research. I had originally designed this research to include the Board, the Lubicon and Unocal. However, with Unocal's rejection of this research, I expanded the study to include more perspectives, increasing the reach of my data.

RECOMMENDATIONS

The following are recommendations that derive from the various participants in this study, the hearings, and the literature search.

1. Recommendations relating to the process of communicating risks in cross-cultural contexts (Usher et al. 1995; CARC 1995; this research):
    - oral presentations are appropriate, but written materials should be provided;
    - pamphlets and videos are better than reports but interactive communication is still more effective;
    - publication and presentation of information in the local language should be possible, even when the group is fluent in English;
    - translation of scientific concepts is not always successful;
    - technical terms should be translated into a more accessible language that can help groups understand the nature of a project;
    - public presentations without interaction are of little use;
    - a cross-cultural mediator can facilitate effective communication;
    - face-to-face communication is required, and
    - communication methods should be field tested.

2. There is a broad spectrum of communication needs within communities. One form of communication may address some of them, but not all of them. Communication techniques need to be innovative. For example, Usher et al. (1995) found that radio phone-in shows were an appropriate way of reaching Inuit communities. *Windspeaker* or other aboriginal newspapers may also be appropriate communication vehicles. The community in question will be able to identify the most appropriate communication channels.

3. Industry, regulatory bodies and communities need to work on coming to a common understanding on terms and issues before a public hearing occurs, or in a pre-negotiation phase in the community.

4. Industry and regulatory bodies need to learn about their own history, biases and cultural contexts with respect to these issues. This kind of knowledge, combined with an education about the issues that specific aboriginal communities face, may help to engender the respect required to build solid relationships.

5. Aboriginal representation on Board panels in projects that are on aboriginal land or in land claims areas is a crucial feature. Because the Board has greater familiarity with issues of farmers and industry, the aboriginal perspective cannot be adequately represented by intervenors alone. This could be countered through the inclusion of the aboriginal perspective. Direct aboriginal representation in the decision-making panel, as well as through Elders panels could redress this imbalance. Individuals can be selected specific to each inquiry, for their knowledge of the area or the people. Further, elders panels can advise the Board on issues that are key to aboriginal culture. The Board panel for decision-making should be run by consensus.

6. Cross-examination procedures should be altered so that Elders and Chiefs are not asked questions that attack or undermine their authority or credibility. Questions controlled by a Board including aboriginal representation can achieve the objective of reliability without being offensive.

7. Partnerships and collaborative ventures between corporations and aboriginal groups are proactive ways of involving communities and minimizing conflict.

8. Land management and environmental assessments will be more complete and successful if traditional knowledge is included. If it is not included, aboriginal communities may continue to refuse to participate in projects and block development. However, this process must be established and controlled by the aboriginal group.

DIRECTIONS FOR FUTURE RESEARCH

The methods and the focus of this study have allowed me to attain the perspectives of diverse groups involved in the management of energy resources in Alberta. Many previous studies in risk management and communication have had top-down approaches, where the needs and thoughts of the public have been assumed or mapped. The strength

of qualitative social science methods is that the needs and thoughts of industry, the regulators and aboriginal groups are not assumed. Rather, they are listened to, documented and analyzed.

Theory and practice of risk communication can both benefit greatly from further research in cross-cultural fields. Further research could concentrate on the common ground between groups and the differences that might lead to miscommunication. Differences in ethnicity, socio-economic status, level of education and gender are also important considerations for theoretical and practical aspects of risk communication.

Research that identifies how communities organize and mobilize around environmental risk issues may reveal how these issues penetrate differences of class or ethnicity. Bullard's (1992) work on environmental equity has shown an association between socio-economic status and siting of industrial projects. Equivalent studies in Alberta may identify similar linkages.

More community-based research could determine the reliability of community experts or lay-experts in quasi-judicial settings. Traditional knowledge and its application and integration into energy resource management should also be explored further. Qualitative methods (focus groups, interviews) are well-suited to these areas.

AFTERWORD: A MEETING WITH UNOCAL

After the research was concluded, I did have an opportunity to meet with Unocal Canada. A string of coincidences connected me to some of the staff in Unocal California. These individuals spoke with Unocal Canada, and I was hired to give a presentation to Unocal staff. This experience was very informative, for although it is not permissible to include the perspective of Unocal in this thesis as they declined to participate, it was an opportunity to listen to the perspectives of those that are intricately involved in the continuing conflict.

REFERENCES

Agar, M. and James MacDonald
1995 Focus groups and ethnography. *Human Organization*. 54(1): 78-86.

Arnstein, Sherry
1969 A ladder of citizen participation. *Journal of the American Institute of Planners*. 35: 215-224.

Anaya, James S. and Theodore MacDonald
1995 Demarcating indigenous territories in Nicaragua. *Cultural Survival Quarterly*. 19(3): 69-73.

Asch, Michael
1992 Errors in *Delgamuukw*: An anthropological perspective. In *Aboriginal Title in British Columbia: Delgamuukw v. The Queen*. F. Cassidy (ed.). Lanzville, B.C. and Montreal: Oolichan Books and the Institute for Research on Public Policy. Pp. 221-243.

1989 Wildlife: Defining the animals the Dene hunt and the settlement of aboriginal rights claims. *Canadian Public Policy*. XV(2): 205-219.

B.C. Roundtable on the Environment and the Economy Dispute Resolution Core Group
1992 *Reading Agreement*. Vol. 1, *Consensus Processes in British Columbia*. Victoria, 1991. *Consensus Processes in British Columbia*. Vol. 2.

Bernard, H. Russell
1988 *Research Methods in Cultural Anthropology*. Newbury Park: Sage.

Brunk, Conrad G., Lawrence Haworth and Brenda Lee
1991 *Value Assumptions in Risk Assessment: A case study of the alachlor controversy*. Waterloo, Ontario: Wilfred Laurier University Press.

Bullard, Robert
1994 Environmental racism and 'invisible communities'. *West Virginia Law Review*. 96(4): 1037-1050.

1992 Environmental blackmail in minority communities. In *Race and the incidence of environmental hazards: A time for discourse*. B. Bryant and P. Mohai (eds.) Boulder, CO: Westview Press.

Bullard, R. And Wright B.
1989 Toxic waste and the African-American community. *Urban League Review*. 13: 67-75.

Canadian Arctic Resource Council
1995 Mining in aboriginal homelands. *Northern Perspectives*. 23(3-4).

Cohen, Raymond
1993 An advocate's view. In *Culture and Negotiation: The resolution of water disputes*. Guy Faure and Jeffrey Rubin (eds.). Newbury Park: Sage Publications. Pp. 22-37.

Covello, V.T., P. Sandman and P. Slovic
1988 *Risk Communication, Risk Statistics, and Risk Comparison: A Manual for Plant Managers*. Washington, D.C.: Chemical Manufacturers Association.

CSE Associates
1995 Environmental conflict resolution. *Proceedings from a course at Banff Centre for Management*. February 18-23, 1996. Banff, Alberta.

Curtis, Sue Ann
1992 Cultural relativism and risk assessment strategies for federal projects. *Human Organization*. 51(1): 65-70.

Derby, Stephen L. and Ralph L. Keeney
1990 Risk analysis: Understanding 'how safe is safe enough?'. In *Readings in Risk*. Theodore S. Glickman and Michael Gough (eds.) Washington: Resources for the Future. Pp. 43-52.

Devereux, Stephen and John Hoddinott (eds.)
1993 *Fieldwork in Developing Countries*. Boulder, CO: Lunne Rienner Publishers.

Douglas, Mary
1992 Risk and blame: Essays in cultural theory. London and New York: Routledge.

Douglas, Mary and Aaron Wildavsky
1983 *Risk and Culture*. Berkeley: University of California Press.

Environmental Protection Agency
1990 *Handbook for Public Involvement*. Washington: E.P.A.

Energy Resource Conservation Board

1995a *Executive Summary: Proceeding No. 941508*. Calgary: ERCB. February 23.

1995b *Decision D 95-4: Proceeding Regarding an Approved Sour Gas Plant, Unocal Canada Management Limited, Slave Field (Lubicon Lake Area)*. Calgary: ERCB.

1994a *Application No. 941508: Unocal Canada Management Limited, Transcripts of the Public Hearings*. V.1-10.

1994b *Guidelines respecting applications for local intervenor's cost awards*. ERCB G-31. Calgary: ERCB.

1994c *Having your say at an ERCB public hearing. Factsheet No. 2*. Calgary: ERCB.

1994d *Energy Resource Conservation Board Act*. Calgary: ERCB.

1994e *Report and Recommendations to the ERCB on Public Safety and Sour Gas*. Appendix B. Calgary: ERCB.

1994f *Decision 94-2: Application for well licenses*. Calgary: ERCB

1993 *What is the Energy Resource Conservation Board? Factsheet No. 1*. Calgary: ERCB.

1987 *The First 50 Years of the Energy Resource Conservation Board*. Calgary: ERCB

Feit, Harvey
1986 Hunting and the quest for power: The James Bay Cree and white men in the twentieth century. In *Native Peoples: The Canadian Experience*. S. Morrison and R. Wilson (eds.) Toronto: McClelland and Stewart. Pp. 129-168.

Fiorino, Daniel
1989 Technical and democratic values in risk analysis. *Risk Analysis: An International Journal*. 9(3): 293-299.

Fischoff, Baruch, Stephen Watson, and Chris Hope
1993 Defining risk. In *Readings in Risk*. Theodore S. Glickman and Michael Gough (eds.) Washington: Resources for the Future. Pp. 30-42.

Fisher, A.
1991 *Risk Analysis: An International Journal*. 11(2): 173-179.

Freeman, Milton M. R.
1985 Appeal to tradition: Different perspectives on arctic wildlife management. In J. Brosted et al. (eds.). *The Quest for Autonomy and Nationhood of Indigenous Peoples*. Bergen: Universitetsforlaget. Pp. 265-281.

Gamman, John K.
1995 Identifying and overcoming obstacles to resoling cross-cultural environmental disputes. *Cultural Survival Quarterly*. 19(3): 44-49.

Goddard, John
1991 *Last Stand of the Lubicon Cree*. Vancouver and Toronto: Douglas & McIntyre.

Hall, Tony
1995 Lennarson of the Lubicon. *Canadian Forum* July/August. Pp. 6-7.

Hance, Billie Jo, Caron Chess and Peter Sandman
1989 Setting a context for explaining risk. *Risk Analysis*. 9(1): 113-117.

Harris, Marvin
1988 *Culture, People, Nature: An introduction to general anthropology, Fifth Edition*. New York: Harper and Row Publishers.

Hoare, Tony, Chris Levy and Michael P. Robinson
1993 Participatory action research in native communities: Cultural opportunities and legal implications. *The Canadian Journal of Native Studies XIII*. 1: 43-68.

Hrudey, Steve
1994 Understanding and managing environmental risk. Proceedings of Canadian Bar Association, National Environmental Law Section. Calgary, Alberta. Oct. 20, 1994.

Investor Responsibility Research Committee
1996 *Social Issues Service Company Report V*. Washington, D.C.: IRRC. Draft Copy.

Johnson, F. Reed, Ann Fisher, V. Kerry Smith and William H. Desvouges
1990 Informed choice or regulated risk? Lessons from a study in radon risk communication. In *Readings in Risk*. Theodore S. Glickman and Michael Gough (eds.) Washington: Resources for the Future. Pp. 247-257.

Kaplan, S. and B.J. Garrick
1981 On the quantitative definition of risk. *Risk Analysis: An International Journal*. 1(1): 11-27.

Kasperson, R.E.
1986 Six propositions on public participation and their relevance for risk communication. *Risk Analysis: An International Journal*. 6(3): 275-281.

Keesing, Roger M.
1981 *Cultural Anthropology: A contemporary perspective, Second Edition*. New York: Holt, Reinhart & Winston.

Kitzinger, J.
1994 The methodology of focus groups: The importance of interaction between research participants. *Sociology of Health and Illness*. 16(1): 103-121.

Krimsky, Sheldon and Dominic Golding (eds.)
1992 *Social Theories of Risk*. Westport, CT: Praeger Publishers.

Krueger, R.A.
1988 *Focus Groups as Qualitative Research*. Newbury Park, CA: Sage Publications Inc.

Law Reform Commission of Canada
1985 *Report on Independent Administrative Agencies, Report 26*. Ottawa: Law Reform Commission.

LeBaron Duryea, Michelle
1992 *Conflict and Culture: A literature review and bibliography*. University of Victoria: University of Victoria Institute for Dispute Resolution.

Legat, Allice
1991 *Report of the Traditional Knowledge Working Group*. Yellowknife, NWT: Department of Culture and Conservation, GNWT.

Leiss, William and Christina Chociolko
1994 *Risk and Responsibility*. Montreal & Kingston: McGill-Queen's University Press.

Leitner, Roland
1994 Urgent Lubicon request update. Published on the Internet. Oct. 17.

Lennarson, Fred
1995 Summary of events occurring around public hearings. Unpublished report.

1994 Misrepresentations and distortions of earlier communications. Reply to fax from Karen Ulch, Lubicon Lake Indian Nation Objection to Unocal Gas. Published on the Internet. September 20.

Lubicon Settlement Commission of Review: Final Report
1993 Edmonton: Government of Alberta
1983 *Appendix 1: Letter to Prime Minister Trudeau from the World Council of Churches.*
1986 *Appendix 2: Fulton Discussion Paper.*
1993 *Appendix 3: Transcripts of Commission Hearings.*

Lund, Brishkai, Catherine Morris and Micelle LeBaron
1994 *Conflict and Culture: Report of the multiculturalism and dispute resolution project.* University of Victoria: University of Victoria Institute for Dispute Resolution.

Malone, Brian J., Q.C.
1991 An analysis of the Lubicon Lake Indian land dispute: A bona fide land claim or convenient media tool? In *The Cambridge Lectures*. Quebec: Les Editions Yvon Blais Inc. Pp. 37-49.

McCreary, Scott
1995 Independent fact-finding as a catalyst for cross-cultural dialogue. *Cultural Survival Quarterly*. 19(3): 50-55.

McKenzie, Colin and Marideth Sandler
1995 Culture, resources and conflict: Challenging assumptions. *Cultural Survival Quarterly*. 19(3): 3.

Merry, Sally
1987 Disputing without culture. *Harvard Law Review*. 100: 2057-2073.

Mimir Corporation
1996 Memo: 5-15-96 Meeting with Unocal and the ICCR. Unpublished memo of the meeting.

Morgan, Granger
1990 Probing the question of technology-induced risk. In *Readings in Risk*. Theodore S. Glickman and Michael Gough (eds.) Washington: Resources for the Future. Pp. 5-16.

Munger, Frank
1992 Making a commitment to social change: Ending the canon of dispute processing research. In *Studies in Law, Politics and Society*. Volume 12. London: JAI Press. Pp. 431-445.

Nader, Laura
1995 Civilisation and its negotiations. In *Understanding Disputes: The politics of argument*. Pat Caplan (ed.) Oxford: Berg Publishers. Pp. 39-64.

National Resource Council
1983 *Risk Assessment in the Federal Government: Managing the process*. Washington, D.C.: National Academy Press.

Ominayak, Bernard
1994 Letter to Mr. Perschon, Unocal Canada. September 27.

Patton, M.Q.
1990 *Qualitative Evaluation and Research Methods*, 2nd ed. London: Sage.

Pavlova, Maria
1993 Superfund and one community program. *American Journal of Industrial Medicine*. 23(1): 183-189.

Peelle, E.
1990 Two citizen task forces and the challenges of the evolving nuclear waste siting process. Presented at the First Annual International High-Level Radioactive Waste Management Conference. Las Vegas, Nevada. April 8-10.

Plough, A. and S. Krimsky
1990 The emergence of risk communication studies: Social and political context. In *Readings in Risk*. eds. T.S. Glickman, and M. Gough, Pp. 223-232. Washington: Resources for the Future.

Posey, Darrell A.
1994 International agreements and intellectual property right protection for indigenous peoples. In *Intellectual Property Rights for Indigenous Peoples: A source book*. Tom Greaves (ed.), Pp. 223-252. Oklahoma City, OK: Society for Applied Anthropology.

Pratt, Larry and Ian Urquhart
1994 *The Last Great Forest: Japanese multinationals and Alberta's northern forests*. Edmonton: NeWest Press.

Richardson, M., J. Sherman and M. Gismondi
1993 *Winning Back the Words: Contesting experts at a public hearing*. Edmonton: NeWest Press.

Roberts, Mere
1995 Indigenous knowledge. Unpublished article.

Ross, Helen
1995 Aboriginal Australians' cultural norms for negotiating natural resources. *Cultural Survival Quarterly*. 19(3): 33-39.

Ross, Marc Howard
1995 Interests and identities in natural resources conflicts involving indigenous peoples. *Cultural Survival Quarterly*. 19(3): 74-76.

Rothman, Jay
1995 Pre-negotiation in water disputes. *Cultural Survival Quarterly*. 19(3): 19-22.

Ruckelshaus, William
1990 Risk, science and democracy. In *Readings in Risk*. Theodore S. Glickman and Michael Gough (eds.) Washington: Resources for the Future. Pp. 105-119.

Rupeshinghe, Kumar
1995 Multi-track diplomacy. *Cultural Survival Quarterly*. 19(3): 13-18.

Salacuse, Jeswald W.
1993 Implications for practitioners. In *Culture and Negotiation: The resolution of water disputes*. Guy Faure and Jeffrey Rubin (eds.). Newbury Park: Sage Publications. Pp. 199-208.

Salem, Paul
1995 Conflict, culture and negotiation in natural resource bargaining. *Cultural Resources Quarterly*. 19(3): 77.

Scientific Panel for Sustainable Forest Practices in Clayoquot Sound
1995 *First Nations' Perspectives*. Victoria, British Columbia: Government of British Columbia.

Schensul, Jean J.
1996 SfAA President's Letter. *Society for Applied Anthropology Newsletter*. 7(1): 2-4

Snider, Judith A. and C. Kemm Yates
1995 Alternative dispute resolution: Use and abuse of information and specialized knowledge. *Alberta Law Review*. XXXIII(2): 301-341.

Smith, James G.E.
1987 The Western Woods Cree: Anthropological myth and historical reality. *American Ethnologist*. 14(3): 434-448.

Stephenson, David J., Jr.
1994 A legal paradigm for protecting traditional knowledge. In *Intellectual Property Rights for Indigenous Peoples: A source book*. Tom Greaves (ed.), Pp. 179-191. Oklahoma City, OK: Society for Applied Anthropology.

Stern, Paul
1991 Learning through conflict: A realistic strategy for risk communication. *Policy Sciences*. 24: 99-119.

Stewart, D.W. and P.N. Shamdasani
1990 *Focus Groups: Theory and practice*. Newbury Park, CA: Sage Publications Inc.

Stevenson, Marc
1996 Indigenous knowledge and people in environmental assessment. *Arctic*. Upcoming.

Susskind, Lawrence and Jeffrey Cruikshank
1987 *Breaking the Impasse: Consensual approaches to resolving public disputes*. New York: Basic Books.

Tavender, E.D.D.
1996 ADR in the oil and gas industry: Today and the future. Presented at Interaction '96: Conflict resolution. Edmonton, Alberta. May 18-24.

Tigar, Michael E.
1993 *Examining Witnesses*. Chicago, Illinois: American Bar Association.

United Nations
1992 *Report of the U.N. Conference on Environment and development*. Rio de Janeiro 3-14 June, 1992. New York, N.Y.: United Nations.

United Nations Human Rights Committee
1990 Historical inequities and recent developments threatening the Lubicon Lake Band's way of life and culture violate minority rights: Lubicon Lake Band vs. Canada. *Human Rights*. 11(3/4): 305-313.

Unocal Corporation
1995 *Annual Report*. El Segundo, California: Unocal Corporation.

Usher, Peter
1995 Co-management and natural resources: Some aspects of the Canadian experience. In *Human Ecology and Climate Change: People and resources in the far North*. Washington, D.C.: Taylor and Francis.

Usher, Peter, Maureen Baikie, Marianne Demmer, Douglas Nakashima, Marc G. Stevenson, Mark Stiles
1995 *Communicating About Contaminants in Country Food: The experience in aboriginal communities*. Ottawa: Inuit Tapirisat of Canada.

Ury, William L, Jeanne M. Brett and Stephen B. Goldberg
1988 *Getting Disputes Resolved: Designing systems to cut the costs of conflict*. San Francisco: Jossey-Bass Publishers

Van Maanen
1988 *Tales of the Field*. Chicago: University of Chicago Press.

1983 *Qualitative Methodology*. Newbury Park: Sage.

Vaughan and Nordemstam
1991 The perception of environmental risks among ethnically diverse groups. *Journal of Cross-Cultural Psychology*. 22(1): 29-58.

Vaughan and Seifert
1992 Variability in the framing of risk issues. *Journal of Social Issues*. 48(4): 119-135.

Wadel, Cato

1969 *Communities and Committees: Community development and the enlargement of community on Fogo Island, Newfoundland.* Newfoundland: Extension Service, Memorial University.

Warshafsky, Ted M.

1992 Successful cross-examination of technical experts. *Trial Diplomacy Journal.* 15(2): 89-94.

Watson, Lynda, Malynda Wheeler and Tee Guidotti

1992 Fort McKay: Community issues from a native perspective. *Issues in the North.* II: 51-65.

Wynne, Brian

1992 Risk and Social Learning: Reification to engagement. In *Social Theories of Risk.* S. Krimsky and D. Golding, (eds.) Pp. 275-300.

1982 *Rationality and Ritual: The Windscale Inquiry and nuclear decisions in Britain.* Chalfont St. Giles, England: The British Society for the History of Science.

Yuhas Byers, Peggy

1991 Focus groups: A qualitative opportunity for researchers. *The Journal of Business Communication.* 28(1): 63-78.

APPENDIX 1

THOSE WHO APPEARED AT THE HEARING

Principles

Unocal Canada Management Limited (Unocal)
Lubicon Lake Indian Nation (Lubicons)
Group for Research and Education in Human Rights
Committee Against Racism
Edmonton Friends of the North Environmental Society (EFONES)
Taiga Rescue Network (Taiga)
Friends of the Lubicon
Canadians for Responsible Northern Development (CRND)
Aboriginal Rights Coalition
Leader of the New Democrats in Alberta
Mennonite Central Committee
Lubicons Settlement Commission of Review
Liberal Opposition in Alberta
Edmonton Indigenous Coalition
R. Wilde
Smith Environmental Association
Energy Resources Conservation Board staff

APPENDIX 2

HISTORICAL SUMMARY OF THE LUBICON CREE NATION

1899 Missed by Treaty 8 Party and SCRIP Commissioners.

1939 First government party visits area, recognized as a separate band and promised a reserve.

1942 Government official removes names of many people from band list to cut down expenses.

1973 Existence of band reaffirmed by Order-in-Council.
Provincial hamlet established in community of Little Buffalo.

1975 Caveat by Lubicon and six other isolated communities, filed to notify outsiders of unextinguished aboriginal title to traditional lands.
Government retroactively passes Bill 29, which changes the law and makes the caveat without basis.

1978 Bernard Ominayak becomes Chief.

1979 All weather road built.
The number of Lubicon on welfare changed from 10 per cent to 90 per cent between '79 and '83.

1983 Moose kill annually decreases from 200 to 19.
Letter to the Prime Minister Trudeau from the World Council of Churches.

1985 D. Crombie, Minister for Indian Affairs, appoints E. Davie Fulton to study situation.
The Lubicon and federal government agree to use Fulton Discussion Paper as a starting point for negotiation. Fulton examines issues including land, band membership, wildlife management, self-government and cash compensation. The paper was never made public and government took a position inconsistent with the 1986 Fulton Paper.

1988 Daishowa pulp mill near Peace River, along with timber lease of 11 000 square miles, including 4000 square miles of traditional Lubicon land announced.
Band sets up blockades; RCMP takes barricades down and arrests 27 Lubicon and supporters.
Premier Getty and Chief Ominayak sign Grimshaw Accord, granting the band 79 square miles of land, including full subsurface rights and a further 16 with only surface rights.

1990 United Nations Committee on Human Rights release report in March. Their conclusion is without precedent. They acted on the belief that the Lubicon had exhausted all other options for internal remedies to their situation.

1991 Woodland Cree Band accepts a settlement package offered by the federal government ($57 million, reserve of 142 square kilometres, 570 members).
Negotiations start again between the federal government and the Lubicon. Federal package is a repeat of 1988 package.

1992 Federal package rejected, Lubicon request $168 million, Ottawa offers only $73 million.

1993 Lubicon Settlement Commission of Review.
Breakaway group, Loon Lake Band established.

1994 Unocal Canada applies to ERCB to expand existing sweet gas plant to a sour gas plant. Expansion is approved. On July 8 the Lubicon find out that the plant is to become sour, and officially alert the ERCB that they will not tolerate a sour gas plant so close to their proposed reserve. Meetings occur in September; on 19 September 1994, the Lubicons request a public hearing. In November and December, the ERCB holds public hearings about the sour gas plant.

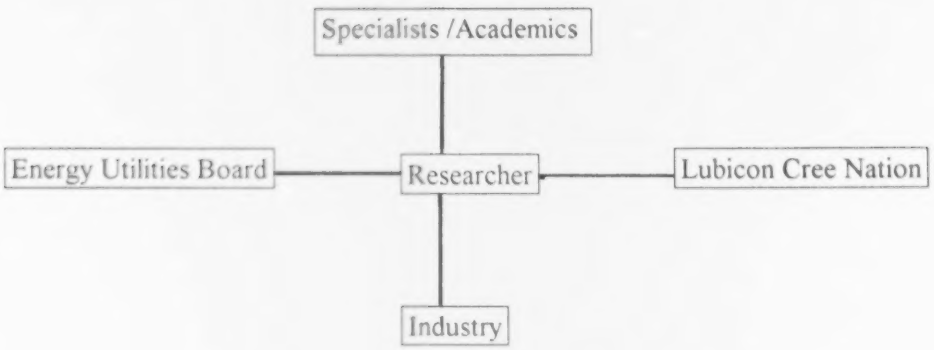
1995 On 23 February 1995, the ERCB affirms Unocal's right to operate a sour gas plant facility.
14 September, Friends of the Lubicon set up a boycott on Unocal.
Little Buffalo Cree Band breakaway group from Lubicon, headed by Billy Joe Laboucan, who cites irreconcilable differences with Chief Ominayak and his council (Laboucan claims that 263 former Lubicon are members; Ominayak states that there are fewer than 100)
October 4, Mike Cardinal, minister responsible for natives, withdraws the Grimshaw Accord, based on membership numbers, claiming that the band must prove that there are at least 450 members. Harold Millican is federal negotiator; John McCarthy is Alberta's negotiator.

1996 Daishowa seeks injunction to prevent boycott of their company which is supported by the Friends of the Lubicon. Attains injunction.

This history is assembled from the following sources: Letter to the Prime Minister Trudeau from the World Council of Churches (1983), *The Lubicon Settlement Commission of Review* (1993), *The Last Stand of the Lubicon Cree* (1991), articles in the *Edmonton Journal*.

APPENDIX 3: SOURCES FOR THESIS, DATES OF INTERVIEW

No.	Interview	Date
1.	Focus Group with EUB	14 October 1995
2.	Specialist involved in Alpac hearing	27 September 1995
3.	Elaine Bishop	7 November 1995
4.	Lubicon Band Member	9 November 1995
5.	Suncor	15 November 1995
6.	Follow up, EUB	20 October 1995
7.	Bob Blair	22 November 1995
8.	Amoco	30 November 1995
9.	Michael Asch	25 November 1995
10.	Larry Reynolds	16 November 1995
11.	Syncrude	5 February 1995



APPENDIX 3: Informants for this research

APPENDIX 4: ETHICS APPROVAL

UNIVERSITY OF ALBERTA

CERTIFICATION OF ETHICAL ACCEPTABILITY

FACULTY OF ARTS HUMAN RESEARCH ETHICS COMMITTEE

APPLICANT'S NAME: Ginger Gibson

APPLICANT'S DEPARTMENT: Anthropology

APPLICATION TITLE: The Gas Plant That Became A Lightning Rod

The application noted above was reviewed by the Faculty of Arts Human Research Ethics Committee. The committee was constituted and the decision was rendered as specified in the University of Alberta Policy Related to Ethics in Human Research (September 1, 1990). The committee reviewers for this application are listed below.

This is to certify that the project and/or procedures outlined in the application were found to be acceptable on ethical grounds and to be generally in accord with policy guidelines as laid down by this University for such research involving human participants.

Date: SEPT 13, 1995

L. Fedigan

Dr. L. Fedigan, Associate Chair
Human Research Ethics Review Committee
Department of Anthropology

Reviewers for this application:

✓ O. Beattie (Anthropology)

✓ R. Gruhn (Anthropology)

✓ C. Urion (Anthropology)

✓ I.S. MacLaren (Canadian Studies)

ddb

WP51\ADM\Ethics.F

APPENDIX 4: INFORMED CONSENT FORM

Interviewer:
Department of Anthropology
University of Alberta
Edmonton, Alberta, Canada
T6G 2H4

Interviewee: _____

Date: _____

As the Interviewee, I have been fully informed of the following points before proceeding with the interview:

1. My participation in this research is completely voluntary and I understand the intent and purpose of this research.

2. Upon my request, I understand that my identity will be kept confidential and that I have the right to withdraw from this research at any time.

3. I know that I may refuse to answer any questions and that I may withdraw at a later date.

4. I am aware that others will be reading the results of this research and that this research will eventually be published.

5. Additional conditions for my participation in this research are noted here:

6. I will receive a copy of this contract.

Signatures..... Interviewee _____

Interviewer _____

C:\WP51\DOCS\ADM\E.CONS\FRM

NOTICE OF HEARING
PROCEEDING NO. 941508
UNOCAL CANADA MANAGEMENT LIMITED

APPLICATION NO. 940704
ALBERTA POWER LIMITED

SLAVE FIELD

TAKE NOTICE that the Energy Resources Conservation Board (ERCB) will hold a public hearing in the 12th Floor Hearing Room at the offices of the Alberta Public Utilities Board, 10055 - 106 Street in Edmonton, Alberta, on Tuesday, 8 November 1994, commencing at the hour of 9:00 a.m., for the purposes of hearing representations respecting:

PROCEEDING NO. 941508 - UNOCAL CANADA MANAGEMENT LIMITED (Unocal)

The proceeding is in regard to a sour gas processing project developed by Unocal in the Slave Field. The gas processing plant is located in Legal Subdivision 9 of Section 15, Township 84, Range 14, West of the 5th Meridian. The plant is designed to process 943 thousand cubic metres per day of raw gas from which 858 thousand cubic metres of sales gas would be produced. The emission rate of sulphur to the atmosphere from the plant's flare stack would not exceed 0.64 tonnes per day.

Copies of the gas plant application and information and particulars filed in support thereof may be obtained from Unocal (Attention: Mr. Howard Boyle), 150 - 6 Avenue SW, Box 1180, Calgary, Alberta, T2P 2K9.

APPLICATION NO. 940704 - ALBERTA POWER LIMITED (Alberta Power)

Alberta Power has applied for approval to construct and operate a 144-kV substation in the Slave Field at Legal Subdivision 8 of Section 10, Township 84, Range 14, West of the 5th Meridian. The proposed substation would be connected to a 144-kV transmission line which runs adjacent to the proposed substation site. Alberta Power has indicated that the facilities are required to supply the electric power requirements of Unocal and other customers in the area.

Copies of this application and information and particulars filed in support thereof may be obtained by interested persons from the applicant, Alberta Power (Attention: Mr. Jim Crinklaw), 10035 - 105 Street, Edmonton, Alberta, T5J 2V6.

In accordance with the Board's Rules of Practice, copies of which may be obtained from any office of the Board, any person intending to appear at this hearing and speak to either project shall file on or before 2 November 194, seven copies of their submission with the undersigned at the address set out below, and one copy with Unocal and one copy with Alberta Power at their respective addresses noted above.

Amoco Canada Petroleum Company Ltd.
Aboriginal Policy

Mission

In support of our business objectives to become a premier company with a competitive advantage, Amoco will establish long term mutually beneficial relationships based on trust, respect and understanding with the aboriginal people of Canada.

Vision

Amoco will proactively promote opportunities for aboriginal people which establishes sustainable self-sufficiency through employment, education, business development and community involvement.

Values

- We value diversity and respect and honour traditional aboriginal values and individual differences.
- We will be honest, fair and trustworthy.
- We share a pledge with aboriginal people to respect the environment.

Amoco Native Affairs operates within the Amoco corporate structure to advise, educate and assist in the development and implementation of programs whereby aboriginal communities and Amoco can constructively work together.

* Aboriginal includes First Nations, Metis, Inuit and non-status.

Policy Guidelines

Employment

Objective
- Proactively develop and increase the opportunity for employment of aboriginal people in all phases of Amoco operations.

Opportunities for Dialogue
- Recruit qualified aboriginal people.
- Promote aboriginal employee career management.
- Provide internship opportunities.
- Provide summer employment and temporary employment for qualified aboriginal people.

Objective
- Build a work environment that is diverse and culturally aware.

Opportunities for Dialogue
- Develop ongoing strategic alliances with other companies and organizations to enhance the opportunities for aboriginal people.
- Develop an aboriginal employees support network.
- Develop an aboriginal element in our orientation program.

Education

Objective
- Create a climate of opportunity for aboriginal people to further their education, skills development and experience.

Opportunities for Dialogue
- Offer scholarships/awards programs.
- Work with the local community to conduct workshops, open houses and career fairs.
- Support specialized programs with local educational institutions.
- Promote stay-in-school incentives.
- Support and promote traditional values textbooks written by the local communities.

Cross-Cultural Awareness

Objective
- Encourage Amoco employees to obtain an understanding of the aboriginal culture, treaties, history and current issues.

Opportunities for Dialogue
- Organize and participate in speaker forums.
- Provide cross-cultural workshops on issues of mutual concern.
- Organize and participate in cross-cultural social and athletic events.

Aboriginal Business Development

Objective
- Develop joint working agreements with aboriginal communities to build business relationships and commitment.

Opportunities for Dialogue
- Support life skills programs.
- Support pre-employment seminars.

Objective
- Invite aboriginal businesses and contractors to participate in Amoco activities.

Opportunities for Dialogue
- Identify a liaison person in operating centres.
- Provide lead time to aboriginal businesses to enable them to mobilize resources and bid on items of work or services.
- Facilitate the timely payment of invoices.

Community Involvement

Objective
- Maintain "good corporate citizenship" within aboriginal communities in Amoco's core areas.

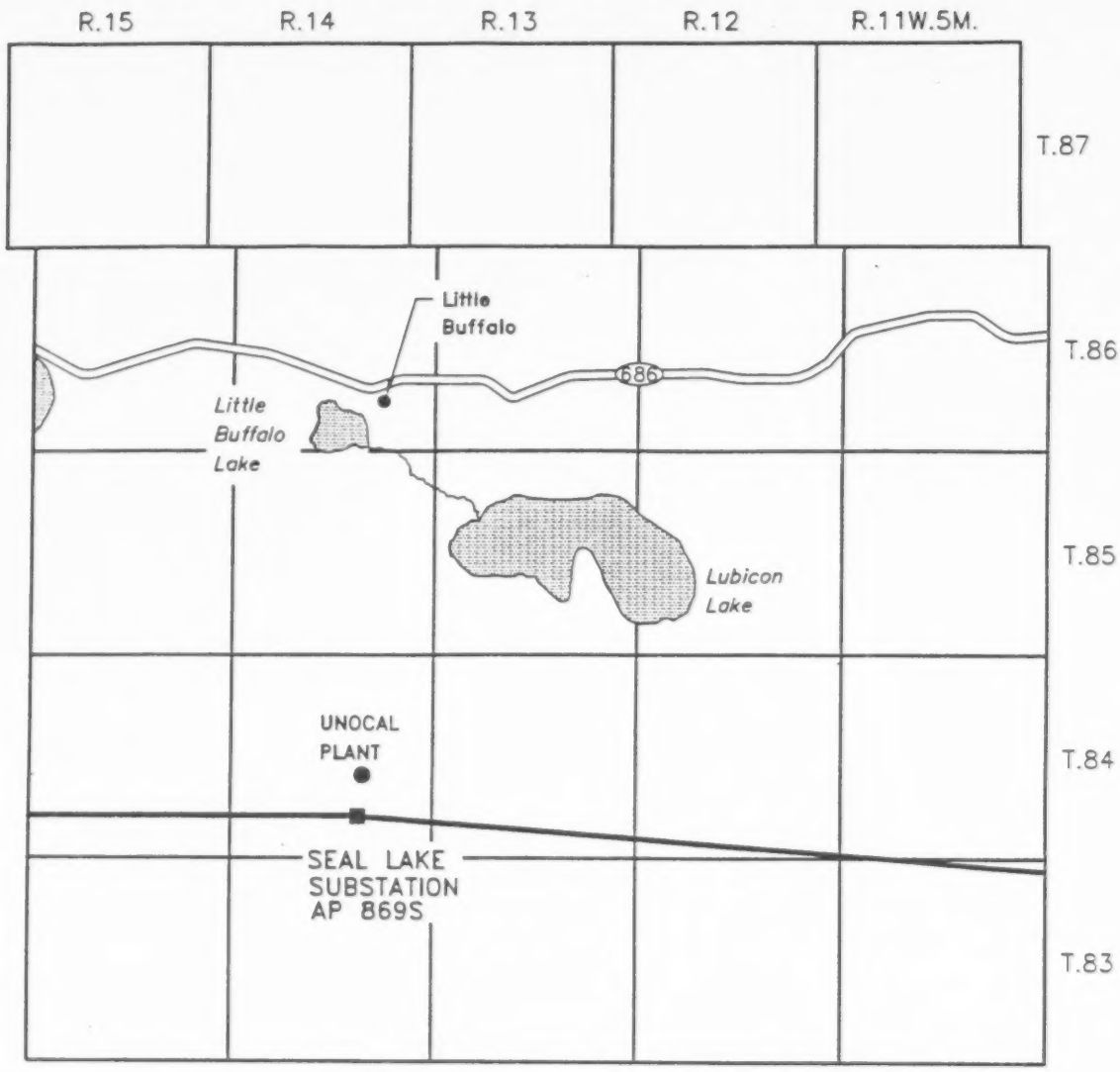
Opportunities for Dialogue
- Support events and programs organized by the aboriginal community.
- Support initiatives and partnerships with aboriginals that promote self-sustainability.
- Support aboriginal involvement in events and programs organized outside the aboriginal community.

Public Consultation

Objective
- Ensure aboriginal communities and Amoco have a clear understanding of each other's plans and needs and to communicate these plans and needs on a timely basis.

Opportunities for Dialogue
- Develop a process to involve aboriginal people from the very early planning stages of exploration through production to post-production restoration.
- Ongoing dialogue and consultation on concerns specific to aboriginal communities.
- Initiate discussions with aboriginal communities to establish a mutually beneficial partnership.

Printed with permission of Amoco Canada Ltd.

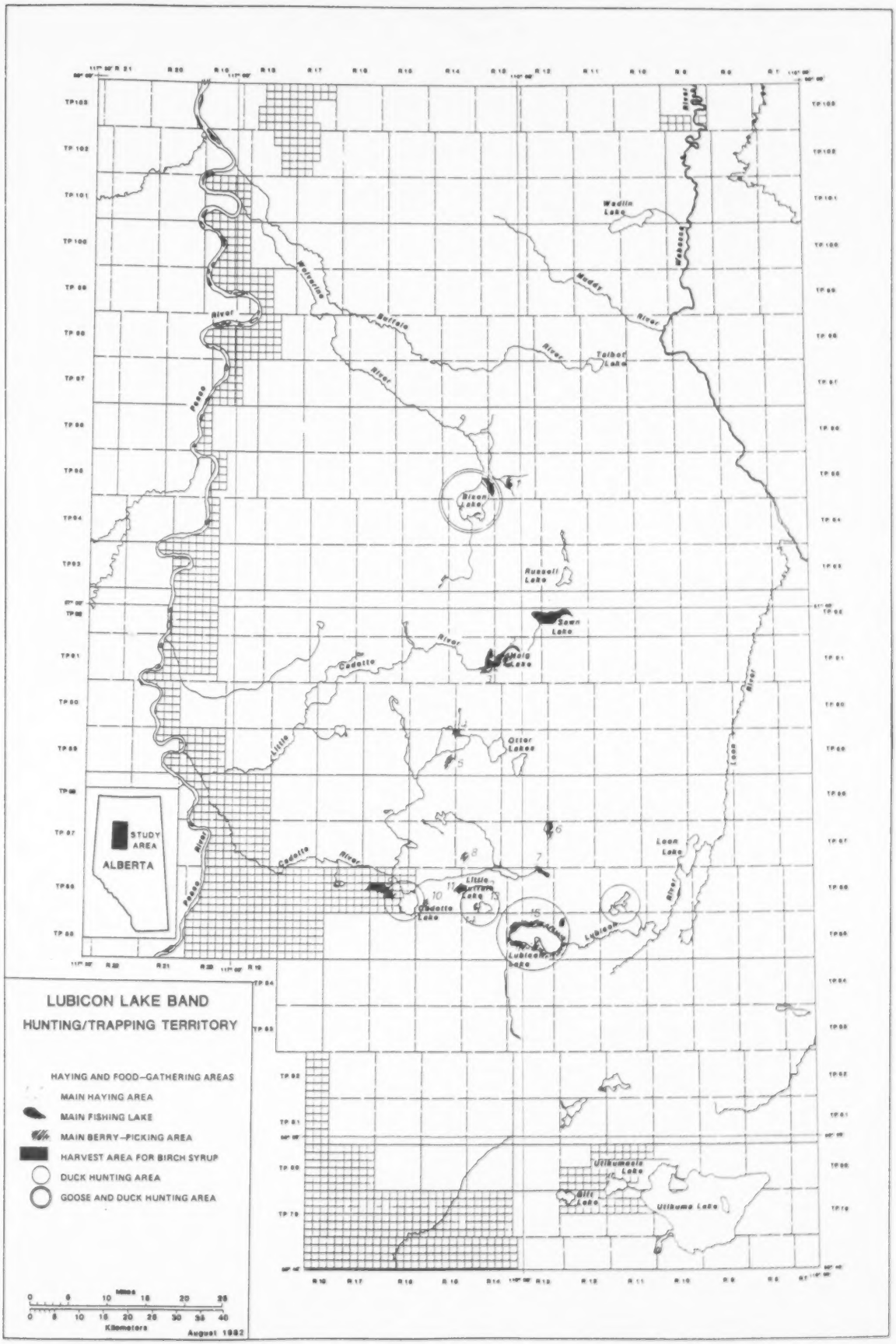


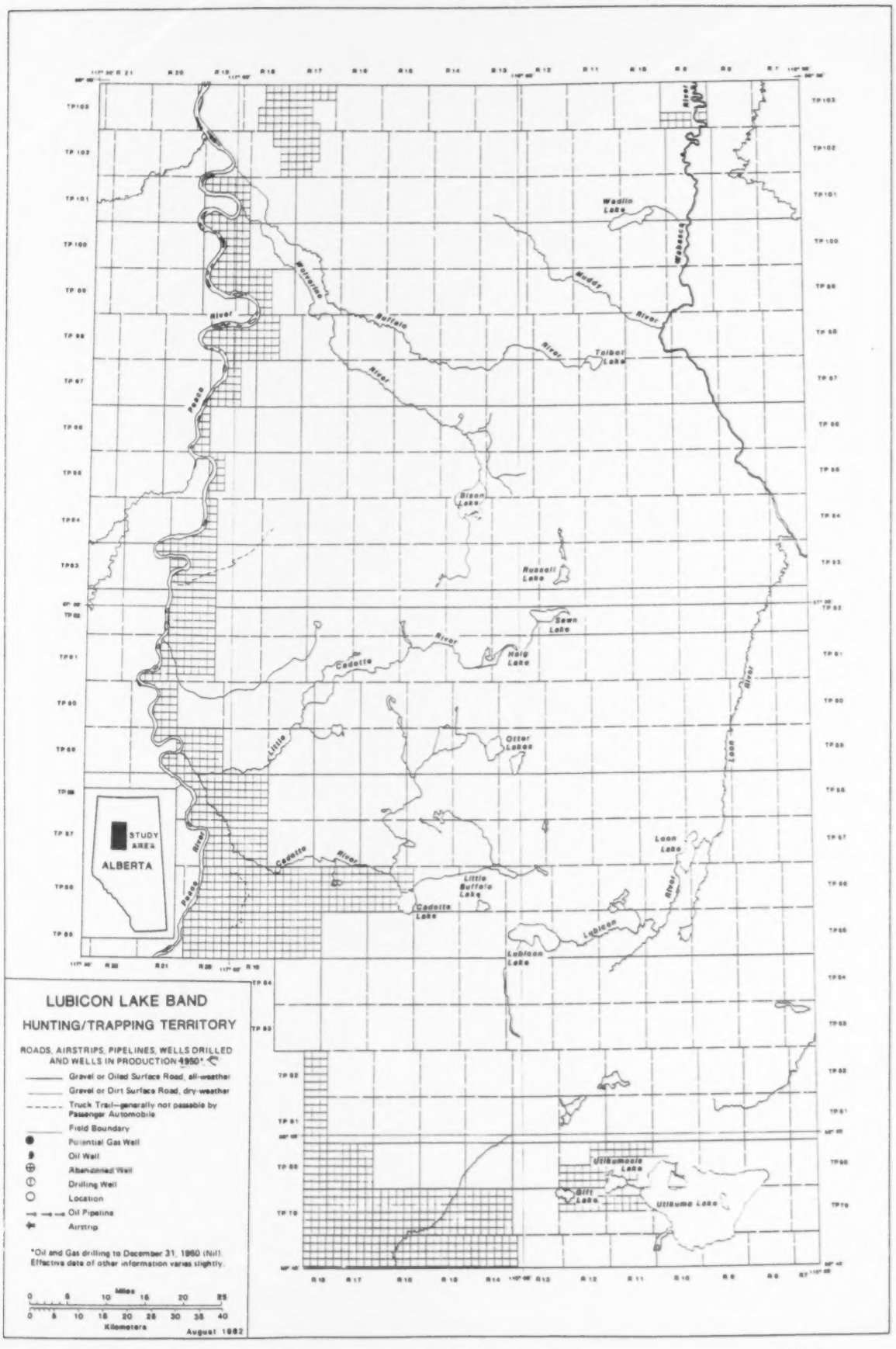
LEGEND

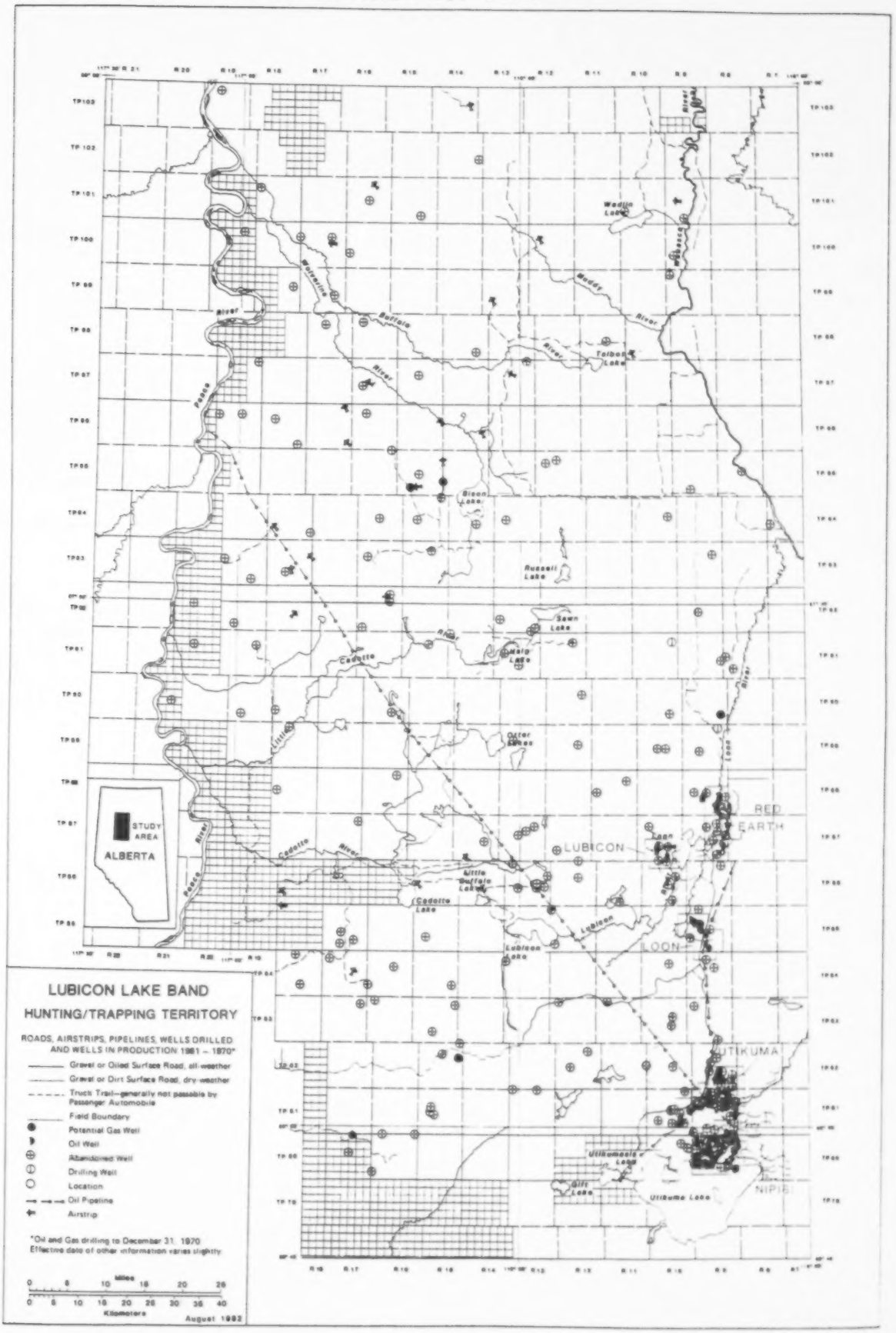
EXISTING 144-kV TRANSMISSION LINE LINE AP 7L12

ERCB
1995b Decision 95-4: Proceeding Regarding an Approved Sour Gas Plant, Unocal Canad

FIGURE 1 PROPOSED ALBERTA POWER LIMITED SEAL LAKE SUBSTATION


LUBICON LAKE BAND
HUNTING/TRAPPING TERRITORY
HAYING AND FOOD-GATHERING AREAS
MAIN HAYING AREA
MAIN FISHING LAKE
MAIN BERRY-PICKING AREA
HARVEST AREA FOR BIRCH SYRUP
DUCK HUNTING AREA
GOOSE AND DUCK HUNTING AREA
STUDY AREA
ALBERTA
Wadlin Lake
Bison Lake
Russell Lake
Sawn Lake
Otter Lakes
Cadotte Lake
Little Buffalo Lake
Lubicon Lake
Loon Lake
Utikumasis Lake
Ute Lake
Utikuma Lake
Peace River
Buffalo River
Muddy River
Cadotte River
Little Buffalo River
Loon River
Talbot Lake
August 1982


LUBICON LAKE BAND
HUNTING/TRAPPING TERRITORY
ROADS, AIRSTRIPS, PIPELINES, WELLS DRILLED AND WELLS IN PRODUCTION 1950*
Gravel or Oiled Surface Road, all-weather
Gravel or Dirt Surface Road, dry-weather
Truck Trail—generally not passable by Passenger Automobile
Field Boundary
Potential Gas Well
Oil Well
Abandoned Well
Drilling Well
Location
Oil Pipeline
Airstrip
*Oil and Gas drilling to December 31, 1950 (Nil). Effective date of other information varies slightly.
Miles
Kilometers
August 1982
STUDY AREA
ALBERTA
Peace River
Watercrane Creek
Buffalo River
Muddy River
Wadlin Lake
Wabasca River
Talbot Lake
Bison Lake
Russell Lake
Sawn Lake
Haig Lake
Cadotte River
Little Otter Lake
Otter Lake
Loon River
Loon Lake
Little Buffalo Lake
Cadotte Lake
Lubicon River
Lubicon Lake
Utikuma Lake
Utikumasis Lake
Silt Lake



LUBICON LAKE BAND
HUNTING/TRAPPING TERRITORY

ROADS, AIRSTRIPS, PIPELINES, WELLS DRILLED AND WELLS IN PRODUCTION 1961 – 1970*

- Gravel or Oiled Surface Road, all-weather
- Gravel or Dirt Surface Road, dry-weather
- Truck Trail—generally not passable by Passenger Automobile
- Field Boundary
- Potential Gas Well
- Oil Well
- Abandoned Well
- Drilling Well
- Location
- Oil Pipeline
- Airstrip

*Oil and Gas drilling to December 31, 1970
Effective date of other information varies slightly

0 5 10 15 20 25 Miles
0 5 10 15 20 25 30 35 40 Kilometers

August 1992

GINGER V. GIBSON

52111 Range Road 210
Sherwood Park, Alberta
T8G 1A1

(403) 922-3709
ginger.gibson@ualberta.ca

My graduate research focused on improving cross-cultural risk communication and dispute resolution. My interest in translating the views of one group to another became the foundation of my master's research project in the interdisciplinary field of environmental risk management. My six years as a canoe guide on the Nahanni River in northern Canada served to develop my interest in the conflicts inherent in differing perceptions of the environment. My ideas were more clearly focused during my undergraduate years in anthropology as I learned the skills of a cultural broker, and the ability to cross the boundaries of groups with different frames of reference or worldviews. In my work I have applied conflict resolution and risk communication theory to identify fresh solutions to long-standing communications problems.

EDUCATION

M.A., Anthropology, University of Alberta
B.A., University of Alberta (Anthropology)
Two years of courses at McGill University
International Baccalaureate Certificate, 1988

SUMMARY OF QUALIFICATIONS

RESEARCH EXPERIENCE

Researched cross-cultural risk communication and dispute resolution for graduate degree
Reviewed historical and contemporary risk literature and developed electronic database
Collected, evaluated and organized data for MIT project on global warming

TEACHING / TRAINING

Consultant to Unocal Canada on cross-cultural communication and decision-making
Teaching wilderness and survival skills to diverse groups
Instructor at Augustana College, teaching wilderness skills, canoeing and orienteering
Senior guide for wilderness trips with duties of guiding, first aid, safety, natural and cultural history interpretation

COMMUNITY-BASED EXPERIENCE

Fund-raiser and worker for immigrant women's organization, Changing Together
Worker for immigrant school drama group
Participated in rural women's development project in seven villages in India

ORGANIZATIONAL EXPERIENCE

Organizational support for international conference on technology and culture
Organizer for Native Women's conference
Volunteer with Interaction '96: Conflict Resolution Transforming the Future

COMMUNICATION

Co-producer and host of radio show on international affairs
Presenting ideas and information to groups and individuals in a variety of settings
Liaison between different groups
Writer for newspapers at McGill University and University of Alberta

LEADERSHIP

Trainer for aboriginal guides on Nahanni River
Organizing and guiding three week wilderness trips
Leading students in discussions

COMPUTER SKILLS

Developed computer database on ProCite
Proficient in both IBM and Macintosh systems

LANGUAGES

English, Spanish, French

AWARDS AND SCHOLARSHIPS

1994-96	Graduate student scholarship funded by the *Eco-Research* Chair in Environmental Risk Management
1996	Scholarship to Advanced Environmental Conflict Resolution Course
1995	Society for Risk Analysis, Award for Best Student Paper
1995	Mary Louise Imrie Graduate Student Travel Scholarship Award

PRESENTATIONS

1996 Focus Groups: Promise and Practice, Alberta Anthropology Conference
1996 Risk Communication: A cross-cultural dialogue, Alberta Anthropology Conference
1996 Taking Cross-Cultural Communication Seriously, Research Revelations, University of Alberta
1995 Traditional Knowledge in Environmental Decision-Making, Society for Risk Analysis
1995 Taking Cross-Cultural Risk Communication Seriously, Society for Risk Analysis
1994 To Picnic or to Process Gas, Society for Risk Analysis

CERTIFICATION

Advanced Environmental Conflict Resolution
Wilderness Emergency Care
Moving Water Instructor
Flatwater Instructor
Swiftwater Rescue Technician
National Park Guide for Nahanni River and Athabasca River

TRAVEL EXPERIENCE

India 1991-92
Ireland 1991
Europe 1982-83
Africa 1971-72